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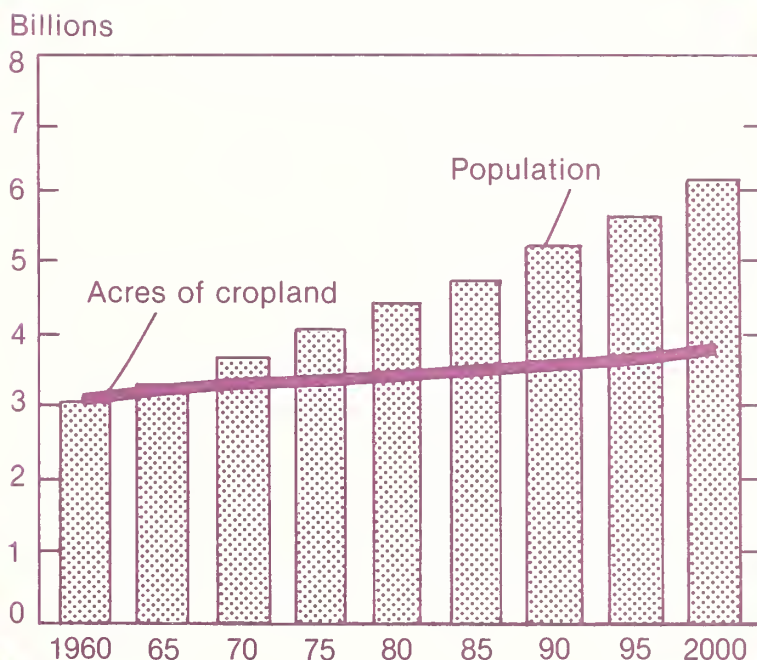
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World Agriculture

Outlook and Situation Report

World cropland expanding more slowly than population, page 25.

World Population and Cropland



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Note: Tons are metric, dollars are U.S., and rice is on a milled basis unless specified otherwise.

Summary

The U.S. dollar has held strong against the five major foreign currencies because of rising U.S. economic growth and higher real rates of return on dollar investments. These conditions are expected to keep the dollar strong through the summer, holding its value above last year. This means U.S. agricultural exports will likely stay at a price disadvantage compared with competitors.

As economic recoveries spread around the world, trade volumes and GNP will probably rise in all regions and inflation remain low, relative to the late 1970's. Strong recoveries in the industrialized countries, especially the United States, Japan, and Canada, have spurred business activity. This in turn is beginning to benefit the developing countries (LDC's) by increasing demand for their exports.

Although 1984 growth rates in most of the world's economies will exceed those of last year, some weaknesses remain, even in some recovering economies. Expanding money supplies in most industrialized countries in 1982 and 1983 suggest rising inflation by next year. Unemployment continues to increase in Europe, where in several countries, the decline in industrial employment could persist through this year despite the continuing recovery. Foreign exchange constraints could remain a burden for many LDC's, even as demand for their exports grows.

Overall, the LDC's have become increasingly important U.S. markets, averaging 33 percent of U.S. farm exports since 1976. In 1983, they took a record 40 percent, valued at \$13.9 billion, including 70 percent of U.S. wheat and flour exports. Increased U.S. exports to LDC's stem from high population growth rates, rising per capita incomes, rapid urbanization, insufficient domestic production, and domestic food policies, among other factors. During the 1980's, most of the world's growth in demand for food has been (and will continue to come) from the LDC's. These countries, in the long run, offer the greatest potential for enlarging international trade.

The world's cropland also continues to expand, but at a much slower pace than population. So food supplies have become more dependent on increased productivity. The world population has grown from 2.5 billion in 1950 to over 4.7 billion in 1984. Over 80 million people are born each year; the majority are born in LDC's where domestic food production cannot support them. Per capita cropland availability has dropped drastically since the 1950's, particularly in Central America, China, Iran, Mexico, North Africa, and South Asia. Although cultivated cropland could expand in Argentina, Brazil, Uruguay, and selected areas of North America, Oceania, Sub-Saharan Africa, and Southeast Asia, most of the future growth in agricultural output will likely continue to come from new technology and increases in productivity.

In Africa, per capita food production has declined 16 percent over the last three decades. Sub-Saharan Africa in particular has suffered droughts, unstable economic and political conditions, and a population growth rate of 3.1 percent. Cereal imports in the region have doubled over the last 8 years, and now supply over 20 percent of cereal consumption, up from 7 percent in 1970. Wheat and rice comprise 80 percent of these imports, which include emergency food aid. Competition for commercial wheat and rice exports to Sub-Saharan Africa is keen, partly because the European Community offers export subsidies on wheat.

WORLD ECONOMIC CONDITIONS

Global Assessment

Recovery Broadens

The 1984 world economic outlook remains positive compared with 1983. Economic growth rates will likely increase in every world region, trade volumes will probably rise, and inflation is apt to remain low relative to the late 1970's. The recovery, which began in 1982 in the United States, is benefiting a broader group of industrialized countries, and is strengthening in those countries where it is already underway. Stronger business activity in these countries has begun to benefit the less developed countries (LDC's) through higher export prices and volumes.

For all of 1984, growth rates for all regions will probably be higher than those of 1983. The growth in 1984 world economic output will likely be between 3.5 and 4.0 percent with a big increase for the industrialized countries. As in 1983, growth in the United States will probably be much faster than in any other industrialized country. The increase in the foreign industrialized countries reflects major improvements in Japan and Canada. With few exceptions, Europe will trail behind North America and Japan.

The growth rate in the centrally planned economies and the LDC's will likely be below the world average, but will probably exceed last year's. Of all the developing regions, Asia is apt to enjoy the fastest economic growth, because of high investment rates and the region's strong export performance. Latin America will likely show the greatest relative improvement, even though its average growth rate is expected to be lower than either Asia's or Africa's.

Although 1984 growth rates will be higher than 1983, all is not economically well in many parts of the world, and much weakness remains even in some recovering countries. For example, the rising rate of monetary growth in most industrialized countries during 1982 and 1983 suggests that inflation could intensify by next year. Unemployment continues to rise in Europe, and in several countries there, the decline in industrial employment could persist through 1984 despite the continuing recovery. Many LDC's still face foreign-exchange constraints, which are apt to remain a burden even as the demand for the countries' exports increases. Large quantities of foreign exchange will have to be allocated for repaying international debts and increases in credit extended to LDC's will likely be small this year.

Economic growth rates

Country	1982	1983	1984 ¹
Industrialized	-0.4	2.2	4.3
Industrialized less U.S.	.5	1.5	3.4
Developing	.7	-3.3	3.4
Africa and Middle East	1.3	-2.2	2.4
Asia	2.8	4.5	5.9
Latin America	-1.6	-3.4	1.6
Centrally-planned	2.5	2.6	3.5
World	.3	1.9	4.0

¹Forecast.

Source: International Monetary Fund, Project LINK.

Trade Likely To Increase

World trade volumes are apt to rebound this year, registering about 3.5 percent growth, compared with negligible growth in 1983. This will likely boost export earnings for most all regions, especially for LDC's that export manufactured goods and industrial raw materials. Asian countries that produce manufactured items will probably see a surge in export volumes and revenues, as could some African nations that export mostly raw materials. Exporters of petroleum, however, will probably fare much worse than average because of continuing slack demand.

The major impetus to stronger trade growth this year will be the continuing recovery in the industrialized countries. Typically, nations import goods at higher rates during the early phases of recovery than during other phases of the business cycle. Import demand in the industrialized nations can be expected to increase fairly rapidly during the recovery, and this increase will translate into higher export earnings for many LDC's.

Strengths of the Foreign Recovery

In the foreign industrialized countries, the recovery is apt to strengthen exports, investments, and to a lesser extent, consumption. The countries whose recoveries have been strongest and will likely remain so through 1984 are Japan, Canada, and to a lesser extent, the United Kingdom (U.K.) and Germany. Some increases will reflect sales to the United States where the greater economic expansion and highly valued dollar are expected to continue to fuel import demand. Japan and Canada, which together provide roughly 40 percent of U.S. imports, will likely benefit proportionately more from the U.S. expansion than Europe.

Growth in investment in the overseas industrialized nations will likely be strongest in Germany, Canada, and Japan. By comparison, U.S. investment is forecast to grow 13 percent, almost twice the German rate. Several factors will probably stimulate overseas investment: low interest rates in Germany, leading to a surge in house building; and export growth in Canada and Japan, leading to investment in export-related industries.

Growth in personal consumption could stay strong in Canada, Japan, and the U.K. in 1984, but is forecast to remain sluggish in Europe. Consumption growth in Canada, Japan, and the U.K. is expected to result from a decline in personal savings, wage increases (for Japan and the U.K.), and a decline in Canada's unemployment rate.

Implications for U.S. Agriculture

Three critical elements of the outlook directly concern U.S. agricultural interests. The first is the dollar. Most analysts predicted earlier in the year that the dollar's value for 1984 would average below that of 1983. As 1984 progresses, however, this projection appears increasingly unlikely; by late May, the dollar was valued 4 percent higher than the 1983 average, despite its decline in February and March. So, for the dollar's 1984 value to equal that of 1983, the currency would have to decline an average of nearly 8 percent for the rest of the year. Assuming the dollar's fall is not so precipitous, it seems

unlikely that U.S. agricultural exports will benefit from a weakening dollar before 1985.

Recent research by the Economic Research Service suggests that a depreciation of the dollar would raise prices and values for U.S. agricultural exports and lower foreign prices of U.S. commodities. The research estimates that a 10-percent depreciation would raise wheat, corn, and soybeans export prices an average of 6 percent, and export values, 2.4 percent. Corn prices are affected more than other commodities, and export volumes for soybeans seem to be relatively more affected by a change in the exchange rate. However, given the 6- to 18-month lag between changes in exchange rates and the effects on trade, it is unlikely that a depreciation of the dollar would benefit U.S. exports this year.

Second, consumption in the industrialized countries will likely lag behind overall economic growth in 1984 and, perhaps, in 1985. High unemployment in Europe will remain a key factor. In December 1983, the Organization for Economic Cooperation and Development (OECD) projected that unemployment in its 18 European members would average 11.3 percent in 1984 and increase to 12 in the first half of 1985.

For a group of major European countries—France, Germany, Italy, the Netherlands, and the U.K.—unemployment has continued to increase throughout the recovery. Unemployment rose above 11 percent in March 1984 from 10.6 a year before; during that same period, industrial output increased about 5 percent. By comparison, unemployment in the United States declined to 7.8 percent from 10.3, while industrial production rose 15. This trend in Europe's unemployment rate reflects an erosion of the region's industrial job base: European employment declined 3 percent during 1980-82 and another 3 percent in 1983. Total output rose only about 1 percent over this period.

The implications of these developments for U.S. agriculture are especially important. Persistent high unemployment in Europe suggests that stagnant real personal income will dampen demand for food and fibers. The high unemployment rate is due to a reduction in total employment, which, in turn, reflects low growth in economic activity and in population. Low growth rates in both of these areas point toward a long-term weakness in demand in Europe relative to other U.S. export markets.

Looking beyond 1984, most forecasts show a slowing of global economic growth by 1986–1985 in the United States, Japan, and Canada. A recurring slowdown in growth could have serious implications for low- and middle-income countries. This slowing is projected to begin when major debtor nations begin repaying debts they rescheduled in 1982 and 1983. A slowdown or decline in export earnings concurrent with increases in foreign-exchange obligations could lead to further debt problems for some countries, especially if the growth in bank loans to the LDC's continues to slow, as it has since 1980.

U.S. agriculture has a large interest in the economic health of the LDC's. A downturn in global economic conditions could have significantly adverse impacts on the regions that purchase a large share of U.S. exports. For

example, LDC's imported an average of one third of U.S. agricultural exports from 1970 to 1983. The importance of the LDC's as markets for U.S. rice and wheat and wheat flour is even more striking: they imported 76 percent of U.S. rice exports, and 60 of both wheat and wheat flour during the 1970's and early 1980's. [Art Morey (202) 447-8470]

Energy

International Oil Prices Stable

World oil markets remain rather sluggish. This is despite some recovery from the recent economic recession, measurable improvement in energy demand, and most recently, new developments in the Iran-Iraq war. Although oil tankers were attacked repeatedly during the week of May 7-15, European and international sources indicated the volume of oil leaving the gulf had not yet been affected significantly.

Spot product prices increased slightly during the last 6 months, but the world average export price for crude oil, at \$28.62 a barrel, was still below the recent OPEC official marker price of \$29 a barrel. Rotterdam spot prices for petroleum products have risen steadily this year, after sharp declines early in 1983. By early April, prices for heating oil and residual oil were 5 to 15 percent higher, and gasoline prices 5 percent lower, than a year ago. These relative prices, compared with prices 12 months ago, were relatively unchanged in late May.

Oil consumption is expected to move up slightly during the year in response to the improved economic outlook, stable prices, and more normal weather. Improved demand may prompt a marginal increase in world oil production, from 52.4 million barrels a day last year to 53 million this year. OPEC production may increase from 17.5 million barrels a day to 18.

For several reasons, market prices for crude probably will remain near current levels in the near term, unless oil shipments through the Arabian Gulf were curtailed drastically. Too much excess oil production capacity in non-Communist countries make any significant oil price increase unlikely. Events in the Arabian Gulf could curtail oil exports sufficiently to reduce excess oil production capacity, at least for a while. If oil shipments were not resumed in due course, the large Government-owned oil stocks in industrialized countries would need to be sold to prevent the same kind of panic buying by oil

World crude oil production¹

Country	1982	1983 ²	1984 ³
<i>Million barrels/day</i>			
OPEC	18.7	17.1	18.0
USSR	12.3	12.4	12.3
USA	8.7	8.6	8.6
Mexico	2.7	2.7	2.8
Canada	1.2	1.2	1.2
North Sea ⁴	2.6	2.8	2.8
China	2.0	2.1	2.1
Other	5.0	5.1	5.2
Total	53.2	52.0	53.0

¹Excluding natural gas liquids. ²Preliminary. ³Forecast. ⁴Denmark, Norway, and United Kingdom.

refiners and consumers that precipitated the "energy crisis" of 1979-80. Contingency plans for coordinated actions by Governments of industrialized countries exist, and presumably would be implemented in an emergency. Although privately held oil stocks in these countries are near minimal levels, both OPEC-owned stocks afloat and Government-owned stocks in consuming countries are much larger than during 1980.

A total cutoff of oil shipments from the Arabian Gulf would reduce the amount available to the rest of the world about 7 percent. In such an event, prices could increase sharply, but would decline when substitute supplies from Government-owned stocks or idle production capacity in other regions replaced this oil. [Richard Taylor (202) 447-8106]

Exchange Rates

Dollar Strengthens

The U.S. dollar has rebounded from its lows in early March, appreciating strongly against all five major currencies most important to U.S. agricultural trade. Strong economic growth in the United States, along with high real rates of return on dollar investments, have provided most of the fuel for the U.S. currency's advance. Such conditions are expected to continue into the summer, leading to a general rise in the value of the dollar for all of 1984 over 1983. Consequently, U.S. exports, including farm products, will again appear at a competitive disadvantage.

Interest Rates Lead Dollar Surge

Interest rates on dollar-denominated instruments rose steadily in March and April, increasing the advantage of such assets over those issued in other major currencies. For example, at the end of April, interest rates on 6-month Euromark deposits fell to almost 6 percent below those available for Eurodollars. This happened after

Foreign currency units per U.S. dollar

Year	Mark	Yen	Pound	Guilder	C. Dollar
1979	1.833	219.2	.4713	2.006	1.171
1980	1.818	226.4	.4299	1.987	1.169
1981	2.257	220.2	.4983	2.492	1.198
1982	2.427	248.8	.5722	2.669	1.233
1983					
Jan.	2.389	232.5	.6341	2.628	1.228
Feb.	2.428	236.1	.6525	2.676	1.227
Mar.	2.408	238.0	.6706	2.681	1.226
Apr.	2.439	237.6	.6505	2.747	1.232
May	2.465	234.7	.6358	2.772	1.228
June	2.548	240.0	.6456	2.854	1.232
July	2.590	240.4	.6539	2.886	1.233
Aug.	2.673	244.4	.6654	2.990	1.233
Sept.	2.670	242.9	.6669	2.986	1.232
Oct.	2.601	232.3	.6675	2.918	1.232
Nov.	2.682	234.9	.6766	3.006	1.237
Dec.	2.749	234.3	.6971	3.084	1.247
1984					
Jan.	2.810	233.7	.7102	3.158	1.248
Feb.	2.698	233.5	.6931	3.043	1.248
Mar.	2.596	225.2	.6864	2.931	1.269
Apr.	2.647	225.2	.7036	2.984	1.279
May ¹	2.745	229.0	.7250	3.105	1.310

¹Preliminary.

Euromark deposits held only a 4.1-percent disadvantage in late February. Higher rates of return make the U.S. dollar more attractive for speculative as well as investment purposes, and have caused a major move out of the mark, along with other European currencies, into the U.S. dollar.

The sustained moderation in inflation (as measured by major price indexes) in the United States has enhanced the relatively high interest rates payable on the U.S. dollar. Inflation-adjusted rates of return on investments in the United States are, without question, the highest in the developed world.

U.S. Economic Growth Boosts Dollar

The economic recovery in the United States has been maintained at a pace exceeding all but the rosier expectations. Strong economic growth encourages new investment, as well as providing convincing evidence that current dollar-denominated assets will continue to produce high returns. Consequently, positive news concerning housing starts, industrial production, and factory orders serve notice (along with other indicators) that the United States is the place for income growth, now and for the near term. When contrasted with possibilities in sluggish European economies and given limited access to opportunities in yen, the dollar becomes the logical instrument for the purchase of assets that promise high real returns as well as safety.

Labor Unrest Undermines Mark

Threats of a major metalworkers' strike in West Germany have led many to believe that languid economic growth there will continue. In addition, the lackluster stock markets and low interest rates have discouraged investment in that country. So the February-March rush into marks from dollars has become a tide in the opposite direction.

The German mark is the major currency in the European monetary system, whose members include all of the European Community (EC) except Great Britain and Greece. All of these monies are tied in closely fixed values to each other. Thus, when the dollar appreciates against the mark, it also gains against the other European currencies. From mid-March to mid-May, the dollar has risen over 6 percent against all monies in the system.

Yen Retains Value

Of the world's major currencies, only the Japanese yen remains above its 1983 average value relative to the U.S. dollar. The robust Japanese economy, combined with the promise of eased restrictions on capital inflows to Japan, have served to create an interest in holding more yen. And the yen promises to be more widely used as a reserve currency in the future (as an alternative to the dollar), further enhancing its appeal.

Dollar To Remain Strong Through Summer

The continued pressure of high interest rates will be enough to keep the dollar above its 1983 average against European currencies at least through the summer. Traders will be wary of being caught short of dollars

until the recovery in Western Europe is more apparent. Record highs against the British pound may be regular occurrences. The German mark will not fall below 2.55 per dollar, at least until the U.S. election nears. The Japanese yen is not expected to go over 235 per dollar, and should strengthen to hold at 225 by the end of the summer. [David Stallings (202) 447-8054]

U.S. AGRICULTURAL TRADE

October-March Farm Exports Up 15 Percent

U.S. agricultural exports in the first 6 months of FY 84 (October 1983-March 1984) at \$20.9 billion, were up 15 percent or \$2.7 billion, despite slightly lower export volume. It's unlikely, though, that this signals the long-awaited upturn in demand for U.S. farm exports. Tighter world supplies for many commodities are responsible for boosting prices and export revenues so far this year.

U.S. agricultural imports also increased 14 percent over a year earlier, reaching a record \$9.3 billion. For FY 84, the agricultural trade surplus is expected to recover from last year's decline, reaching \$20.5 billion. In FY 83, not only did the agricultural trade surplus fall 22 percent, but the nonagricultural trade deficit expanded sharply, resulting in a record \$51.6 billion merchandise trade deficit.

The outlook for U.S. exports in FY 84 has improved somewhat since the February estimate. Exports are now expected to reach \$38 billion, up \$500 million from the February estimate, because of better prospects for corn, soybeans, and cotton.

Early season estimates for agricultural exports in FY 85 indicate improved demand for corn, soybeans, and soybean meal, while food grains—wheat and rice—and cotton exports are projected to decline. All the major com-

U.S. agricultural export volume¹

Commodity	1981	1982	1983	1984 ²
<i>Million metric tons</i>				
Wheat	42.2	44.6	36.7	37.5
Wheat flour	.9	.7	1.5	1.1
Feed grains	69.0	57.9	53.8	56.2
Rice	3.2	2.9	2.3	2.0
Feeds and fodders	5.8	6.0	6.9	7.2
Soybeans	20.0	25.5	24.5	20.1
Soybean meal	6.1	6.3	6.4	5.1
Other oilcake and meal	.4	.3	.2	.2
Soybean oil	.7	.9	.9	.7
Other vegetable oils	.9	.7	.7	.7
Sunflowerseed	1.4	1.5	1.4	.6
Cotton, including linters	1.3	1.6	1.2	1.6
Tobacco	.3	.3	.2	.2
Fruits, vegetables, & nuts	4.2	3.9	3.0	2.9
Beef, pork, & variety meats	.4	.4	.4	.4
Poultry meat	.4	.3	.3	.2
Animal fats	1.5	1.5	1.4	1.4
Other	3.6	2.6	3.0	1.9
Total	162.3	157.9	144.8	140.0

¹Fiscal year, actual export tonnages. Excludes animal numbers and some commodities reported in cases, pieces, dozens, liquid measures, etc. ²Forecast.

modities are expected to sustain price reductions at the farm level, which should translate into lower export prices.

Wheat exports were down 1 percent to 18.9 million tons during the first 6 months, despite an 800,000 increase to the Soviet Union. World wheat trade is projected in 1984 to remain near its record 100 million tons. All major U.S. competitors—Canada, Australia, Argentina, and France—are expected to increase market shares from last year. Combined production in these countries, all of whom produce primarily for export, has expanded nearly a third over the past 4 years.

The Soviet Union has already bought 6 million tons of U.S. corn in 1983/84. A third straight year of drought in South Africa has forced that country, which normally exports 3 to 4 million tons, to import over 2 million from the United States this fiscal year. Japan has increased its purchases of U.S. feed grains 18 percent.

Exports of soybeans, soybean meal, and soybean oil were down 16, 18, and 2 percent in volume, respectively, during October-March, as higher prices ration the short 1983 U.S. soybean crop. Because 25 to 30 percent of U.S. soybean oil exports are shipped under concessional arrangements, they were not affected as adversely as meal and beans.

This year, as last, European feed importers are finding it advantageous to increase their purchases of corn gluten feed from the United States despite pressure from the EC to cut back those purchases. Corn gluten shipments through March totaled 2 million tons, up 19 percent from a year ago. While corn gluten export prices are up 15 percent, the incentive for increased imports is still positive when compared with the high EC administered prices for grain, or the world free-market prices for soybeans and soybean meal.

U.S. agricultural export values¹

Commodity	1981	1982	1983	1984 ²
<i>Billion dollars</i>				
Grains and feeds	18.0	19.4	15.2	16.7
Wheat	6.4	7.8	6.7	6.2
Wheat flour	.2	.2	.2	.3
Rice	1.5	1.1	.9	.8
Feed grains	10.4	7.0	6.6	7.8
Feeds and fodders	1.1	1.0	1.2	1.3
Oilseeds and products	9.3	9.5	8.9	8.9
Soybean cake and meal	1.6	1.5	1.4	1.2
Soybeans	6.0	6.5	5.9	6.2
Soybean oil	.5	.5	.5	.6
Animals and products	4.1	4.1	3.7	3.9
Hides and skins	1.0	1.0	1.0	1.0
Red meats, incl. offals	1.0	1.0	.9	1.0
Animal fats	.8	.7	.6	.6
Poultry products	.8	.6	.5	.4
Dairy products	.2	.4	.4	.4
Fruits, vegetables, & nuts	3.6	3.4	2.9	2.9
Cotton, incl. linters	2.2	2.2	1.7	2.4
Tobacco	1.3	1.5	1.5	1.4
Other	1.9	1.3	.9	1.3
Total	43.8	39.1	34.8	37.5

¹Fiscal year. ²Forecast.

U.S. cotton exports in FY 84 are now expected to approach 1.6 million tons. Shipments to date have maintained the robust pace that began in December. Through March, exports are 827,500 tons compared with only 536,300 a year ago. The Soviet Union, normally the world's second largest exporter behind the United States, not only lost market share in some countries due to another poor crop, but also was forced to import cotton from the United States. Pakistan, another major exporter, suffered from a poor crop. [Stephen R. Milmo (202) 447-8054]

WORLD COMMODITY DEVELOPMENTS

Food Grains

World supplies of food grains in 1984/85 are forecast to rise nearly 2 percent from a year earlier. The rise comes from larger beginning stocks of wheat and record production of both wheat and rice. Consumption will likely outpace production, causing a marginal decline in ending stocks. Trade in these grains during 1984/85 will likely remain stagnant as domestic production meets increased consumption in most importing countries. World prices for wheat are anticipated to fall again, reflecting continued burdensome supplies, while rice prices will likely remain near their present low.

The wheat situation in 1984/85 is expected to resemble that of the previous 2 years: record global production and consumption, with ending stocks remaining near record. Domestic production will provide almost all of the increase in use, because world trade (excluding intra-EC trade) is expected to be around 100 million tons for the fourth consecutive year. Combined exportable supplies in the five major wheat exporters (U.S., Canada, Argentina, EC, and Australia) are anticipated to be record large. U.S. export prices could fall for the fourth consecutive year because of large surpluses and the lowering of the U.S. loan rate for 1984/85.

Winter Wheat Sowings Up

Most regions in the Northern Hemisphere, where winter harvesting has already begun, will likely have good wheat crops because of an increase in sown area and generally favorable weather. Even though yields will likely be lower, U.S. wheat production is expected to increase to 69.4 million tons in 1984/85, a rise of 3.4 million, because of larger harvested area.

Prospects for the USSR crop are better than last year because of increases in sown area and yields. The total wheat crop is anticipated to be 85 million tons, up 7 million from last year. However, timely rains in June, when the crop enters the reproductive stage, will be crucial. Despite an increase in fall sowings, China's total production is forecast to fall 1.4 million tons from 1983/84's record 81.4 million, because yields are not expected to match last year's exceptional level.

In Europe, the sown area was also up last fall. EC plantings increased about 5 percent, and adequate moisture conditions and a relatively mild winter could boost the Community's production to 63 million tons, 4 million more than last year. Production in Eastern Europe is

expected to be slightly below last year because of a smaller crop in Yugoslavia.

In India, the area sown to wheat was marginally above last year, and recent harvest weather has been favorable. Therefore, a record crop is likely. Turkey's crop could fall slightly from last year because of unfavorable weather. The harvested area in Mexico will be up substantially, and output will likely be close to 1982's record. Several North African countries experienced bad weather earlier in the season, but increased precipitation, especially in Algeria, Morocco, and Tunisia, has benefited growth, but additional rains are needed. Canadian planting intentions indicate that the area sown to spring wheat will be down 2 percent. This is expected to translate into about a 1-million-ton decline in output.

In the Southern Hemisphere, winter wheat is being seeded. During March and April, precipitation improved the outlook for planting in South Africa, providing much-needed relief following the extended drought but soil moisture reserves remain low. Producers might have increased wheat plantings to help recoup losses from the poor 1983/84 corn crop. The forecast is for a wheat crop of 1.9 million tons, slightly above last year. Output in Australia is forecast 5 million tons below last year's record 22 million. Output in Argentina could increase slightly.

Feed Wheat Trade High in 1983/84

Large available supplies and high corn prices have led to several million tons of weather-damaged or feed-quality wheat being traded so far in 1983/84. While Australia has sold the largest amount, approaching 2 million tons, smaller sales have been made by other exporters. Principal Australian sales have been to South Africa, South Korea, Mexico, and Bangladesh. Because of a poor corn harvest, South Africa has purchased 400,000 tons of wheat to help meet domestic feed requirements and may buy more. This is that country's largest purchase of wheat in 18 years. Sales of lower quality wheat will likely continue this summer because of plentiful supplies. The EC plans to sell 1 million tons of denatured wheat abroad.

Export Competition High in 1984/85

The major exporters will again struggle to maintain their market shares. Canadian sales will likely increase about a half million tons, but Argentina's exports will fall. Large shipments during December 1983-June 1984 have left little Argentine wheat available to ship during July-November. In comparison, Argentina shipped 2.4 million tons during July-November 1983.

Australia's exports could increase about 2 million tons. Because of an increase in exportable supplies, the EC will be pressured to also increase exports. Collectively, the major foreign exporters are expected to increase trade about 1.5 million tons to a record 59.5 million.

The U.S. export forecast for 1984/85 now stands at 36.7 million tons, down 2 million from 1983/84. The U.S. share of the world market will fall slightly below 1983/84's 38 percent, compared with the record 48 percent in 1981/82. U.S. wheat sales to China could likely

Wheat: World production, consumption, and net exports¹

Country	1982/83			1983/84			1984/85 ²		
	Prod.	Cons.	Net exports	Prod.	Cons.	Net exports	Prod.	Cons.	Net exports
<i>Million metric tons</i>									
Major exporters									
United States	76.5	25.4	39.7	66.0	32.1	38.0	69.4	30.6	36.7
Canada	26.8	5.1	21.2	26.9	5.3	20.5	26.0	5.4	21.0
Australia	8.9	4.1	8.1	22.0	3.3	12.0	17.0	3.4	14.0
EC-10	59.8	44.5	12.3	59.2	50.1	11.3	63.2	49.4	13.2
Argentina	14.5	4.5	7.5	12.0	4.5	9.5	12.2	4.5	8.0
Turkey	13.8	13.7	.5	13.3	13.6	.2	13.1	13.7	-.4
Major importers									
USSR	86.0	105.7	-19.7	78.0	94.5	-19.5	85.0	104.0	-19.0
China	68.4	81.4	-13.0	81.4	91.4	-10.0	80.0	92.0	-12.0
Eastern Europe	34.7	36.6	-2.0	34.8	36.6	-2.3	34.0	37.0	-2.8
Other W. Europe	8.5	9.1	+.3	8.8	9.5	-.7	8.4	9.0	-.4
Brazil	1.8	6.3	-3.6	2.1	6.3	-4.4	2.2	6.3	-4.2
Mexico	4.2	4.1	-.1	3.2	4.1	-.6	3.8	4.2	-.5
Other Latin Am.	1.3	7.6	-6.5	1.2	8.5	-7.1	1.4	8.6	-7.0
Japan	.7	6.1	-5.5	.7	6.1	-5.3	.6	6.1	-5.4
India	37.5	37.8	-3.6	42.5	41.9	-2.5	44.6	44.3	-.5
South Korea	.1	2.0	-1.9	.1	2.7	-2.5	.1	2.5	-2.5
Indonesia	0	1.5	-1.5	0	1.7	-1.7	0	1.7	-1.8
Other Asia	16.8	23.1	-6.4	18.0	24.2	-6.7	17.0	24.4	-6.7
Egypt	2.0	7.8	-5.3	2.0	8.0	-6.8	2.0	8.2	-6.8
Morocco	2.2	3.8	-1.3	2.0	4.2	-2.3	2.0	4.3	-2.3
Other N. Africa/ Mideast	12.2	23.1	-10.4	12.2	25.0	-13.4	12.8	25.9	-12.5
Other Africa	3.6	7.0	-3.7	2.8	7.4	-4.1	3.0	7.6	-4.6
Residual	.3	8.8	-5.1	.3	1.8	-1.6	.2	5.1	-3.5
World	480.6	469.1		489.5	482.8		498.0	498.2	

¹Trade on July-June years. ²Forecast.

Rice: World production, consumption, and net exports¹

Country	1982/83			1983/84			1984/85 ²		
	Prod.	Cons.	Net exports	Prod.	Cons.	Net exports	Prod.	Cons.	Net exports
<i>Million metric tons</i>									
Major exporters									
United States	4.9	2.1	2.3	3.2	2.2	2.0	4.8	2.3	2.0
Thailand	11.1	8.0	3.7	11.9	8.1	3.9			
Pakistan	3.4	2.3	1.3	3.5	2.3	1.3			
China	112.9	112.4	.5	118.2	117.7	.5			
India	46.5	48.4	-.1	57.0	55.1	-.5			
Burma	9.1	8.3	.8	9.3	8.5	.8			
Japan	9.3	10.8	-.3	9.4	9.8	.1			
Italy	.6	.3	.4	.7	.3	.4			
Australia	.4	.1	.3	.5	.1	.4			
Major importers									
Indonesia	23.2	24.0	-1.2	23.5	24.7	-.7			
South Korea	5.2	5.3	-.2	5.1	5.5	-.2			
Bangladesh	14.2	14.6	-.1	14.8	15.1	-.2			
Vietnam	9.0	8.8	-.1	9.1	8.9	+.2			
Other Asia	16.7	17.4	-.4	16.9	17.8	-.7			
USSR	1.6	1.9	-.3	1.6	2.0	-.4			
Brazil	5.3	6.2	-.4	6.1	6.2	-.1			
Other Latin Am.	4.8	4.8	-.1	4.5	5.0	0			
Iran	.9	1.5	-.7	.9	1.6	-.7			
Other N. Africa/ Mideast	2.0	3.6	-1.8	2.0	3.7	-1.7			
Malagasy	1.3	1.5	-.3	1.5	1.7	-.2			
Nigeria	.9	1.6	-.7	.9	1.6	-.8			
Other Africa	1.8	3.6	-2.0	1.7	3.7	-2.0			
Residual	.7	2.8	-1.2	.4	1.6	-1.4			
World	285.8	290.3		302.7	303.2		304.7	305.5	

¹Trade on calendar years; calendar 1982 corresponds to 1981/82. ²Forecast.

show the largest gain; China could become the largest U.S. customer provided it fulfills last year's shortfall and this year's provisions of the long-term grain agreement.

Record Rice Output Again in 1984/85

World rice production in 1984/85 is forecast at 448 million tons, slightly above 1983/84. U.S. production is expected to rebound from 4.5 million tons to 6.8 million. World ending stocks might fall for the sixth consecutive year, as some foreign producers continue to reduce excess stocks. Trade in 1984/85 will likely be slightly below the current forecast for 1983/84.

Production of rough rice in 1983/84 is placed at 445 million tons, sharply above last year's record 420 million. Rice trade in calendar 1984 is forecast about the same as last year, with increased Indian purchases offsetting reduced trade in several importing countries. India has purchased large quantities of rice this year because of a drought that affected the 1982/83 crop. India usually imports wheat when a cereal shortfall exists, but it has purchased rice at relatively favorable prices this year. Indonesia's imports are expected to fall from nearly 1.2 million tons in 1983 to 700,000 this year because of an increase in Government-held stocks.

Thai rice export prices are about \$255 a ton, well below the \$440 U.S. price. Because of this price differential, Thai exports in calendar 1984 may reach a record 3.85 million tons, while the U.S. volume will likely fall to 2 million, the lowest since 1976. [Bradley Karmen (202) 447-8879]

Coarse Grains

Coarse grain production in 1984/85 is expected to rebound significantly from depressed year-earlier levels, especially in the United States and other major exporting countries. World trade in coarse grains likely will grow as the global economy continues to improve, Soviet purchases remain strong, and the wheat-to-corn price relationships return to more normal levels.

Production and Trade To Improve

Global production of coarse grain in 1984/85 likely will increase around 15 percent from its relative low in 1983/84. The U.S. corn area will rebound from the drought- and PIK-reduced level of 1983/84. Canadian and EC barley production are expected to return to more normal levels, and South African corn production may increase with the onset of improved weather.

The expected increase in world coarse grain production in 1984/85 will likely lower corn prices, further boosting coarse grain trade. This reduction, coupled with uncertainty surrounding exports of wheat for feed from the EC and Australia, indicate a promising year for coarse grain trade.

Soviet imports are expected to increase. The USSR is expected to maintain record livestock inventories and boost livestock production while it faces another disappointing grain crop outturn. EC coarse grain imports may decrease in 1984/85, but other West European imports may pick up. With an expected large China

grain crop in 1984/85, coarse grain imports from the United States are likely to be relatively small. Virtually all U.S. grain sales under the U.S.-China long-term grain agreement will be wheat.

Production Down Sharply in 1983/84

Coarse grain production in 1983/84, estimated at over 686 million tons, is 99 million (13 percent) below last year's record. Much of the decrease comes from reduced acreage and drought in the United States. However, foreign production, forecast at 548 million tons, is almost 20 million larger than a year earlier. The bulk of the increase is from the unusually large Soviet harvest, 105 million tons, record production in China, and a substantial gain in Australian production. Australian output is estimated at 9.7 million tons, up over 150 percent from the disastrous 1982/83 outturn.

Production among the major importers in 1983/84 is forecast at 272 million tons, marginally higher than the previous year, but significantly above 1981/82. The bulk of the increase was in the USSR.

The major foreign exporters' (Canada, Australia, Argentina, Thailand, and South Africa) output picked up in 1983/84 to just over 58 million tons, but remains about 10 percent below 1981/82. An extended drought in South Africa lowered the coarse grain crop to under 5 million tons for the second consecutive year, making South Africa a net importer. Canadian production (estimated at 21 million tons) remains around 25 percent below each of the last 2 years.

Supply Falls as Use Increases Slightly

Global supplies (beginning stocks plus domestic production) in 1983/84, forecast at 826 million, are down about 8 percent. This is in contrast to the 5-percent gain registered in 1982/83. As with the production changes, the United States is largely responsible. In spite of U.S. beginning stocks (98 million tons) 44 percent above a year earlier, the dramatic drop in U.S. production cut U.S. supplies to only 236 million tons, compared with 323 million in 1982/83. Foreign supplies in 1983/84, at 590 million tons, are 15 million larger than the previous year, after registering only a 4-million increase in 1982/83.

Global use is expected to increase a modest 3.5 million tons relative to 1982/83. However, feed use is estimated to fall over 2 percent to 450 million tons. In contrast, feed use in 1982/83 rose 3 percent. Declines of about 18 million tons in U.S. feed use will offset a 6-million-ton increase in foreign feed use. The major importers will account for most of the increase. Soviet feed use is estimated to have risen to a record, because of increased feed grain and meat production. Uses among the major exporters have remained relatively stable over the last 3 years.

Exports Slightly Improved

Global exports, exclusive of intra-EC trade, are forecast at almost 92 million tons in 1983/84, up marginally over the previous year, but still 7 percent below 1981/82. Although the trend of decreasing coarse grain trade has reversed this year, the absolute level of trade is small

Coarse grains: World production, consumption, and net exports¹

Country	1982/83			1983/84			1984/85 ²		
	Prod.	Cons.	Net exports	Prod.	Cons.	Net exports	Prod.	Cons.	Net exports
<i>Million metric tons</i>									
Major exporters									
United States	254.6	171.2	53.5	138.0	154.5	55.6	235.6	158.6	57.8
Canada	26.7	18.7	6.3	21.3	18.5	6.2	23.9	18.4	5.8
Australia	3.8	2.8	.8	9.7	3.2	4.0	7.4	2.9	4.1
Argentina	18.1	6.9	11.7	18.2	6.8	12.0	18.0	6.9	11.5
Thailand	3.8	1.3	2.4	4.3	1.2	3.2	4.5	1.3	3.2
South Africa	4.5	8.0	1.5	4.9	8.0	-2.7	9.7	7.7	-2.0
Major importers									
USSR	86.0	98.3	-11.0	105.0	115.0	-11.5	95.0	109.0	-14.0
China	86.0	88.7	-2.6	93.0	93.5	-.1	95.0	96.1	-1.0
Eastern Europe	71.9	71.7	-1.8	65.8	67.1	-1.6	66.0	67.7	-1.6
EC-10	71.6	72.1	-1.9	63.9	68.3	-3.5	68.0	69.5	-1.6
Other W. Europe	21.9	31.3	-8.7	22.0	31.0	-8.0	23.7	32.1	-8.5
Brazil	19.9	21.3	+.3	21.0	21.1	-.5	23.0	23.1	-.1
Mexico	10.2	18.8	-7.4	14.0	18.4	-5.7	13.6	19.3	-6.0
Venezuela	.9	2.8	-1.3	.7	2.6	-1.4	1.0	2.4	-1.4
Other Latin Am.	7.7	10.2	-2.2	7.7	10.1	-2.4	8.1	10.4	-2.6
Japan	.4	19.0	-18.1	.4	19.7	-19.2	.4	19.5	-19.6
Taiwan	.1	4.5	-4.1	.2	4.3	-4.4	.2	4.4	-4.5
South Korea	.9	5.2	-4.1	.9	4.9	-3.8	.8	4.8	-4.0
Other Asia	41.2	43.9	-2.4	46.0	47.9	-2.1	45.8	48.0	-2.2
Egypt	4.1	5.3	-1.6	4.3	5.8	-1.7	4.3	6.1	-1.9
Iran	1.3	2.5	-1.3	1.3	2.4	-1.2	1.3	2.6	-1.3
Israel	.1	1.3	-1.1	.1	1.3	-1.2	.1	1.4	-1.3
Other N. Africa/ Mideast	17.3	23.5	-4.9	14.9	22.2	-6.7	15.9	22.8	-7.2
Other Africa	31.9	33.9	-1.0	28.2	30.8	-1.8	31.8	33.9	-2.0
Residual	.3	-5.1	-1.0	.6	3.0	-1.5	.7	4.0	+.4
World	785.2	758.1		686.4	761.6		793.8	772.9	

¹Production on crop year basis, trade on Oct.-Sept. year. ²Forecast.

International commodity prices

Year	Wheat				Corn		Soybeans	Soyoil		Soymeal 44%	
	U.S. No. 2 ¹	Argentina ²	Canada No. 1 ³	Australia ⁴	U.S. No. 2 yellow ⁵	Argentina ²	U.S. No. 3 yellow ⁵	Decatur	Dutch ⁶	Decatur	Hamburg ⁶
<i>Dollars per metric ton</i>											
1975	149	147	181	167	122	126	210	559	563	141	162
1976	134	128	149	147	115	114	223	414	438	179	203
1977	105	100	116	113	98	93	271	524	579	212	240
1978	131	126	134	119	105	102	259	565	607	189	226
1979	162	159	171	142	118	117	278	610	662	160	254
1980	176	203	192	175	129	159	272	522	598	217	271
1981	176	190	194	175	135	139	272	464	507	223	269
1982	161	166	165	160	110	109	233	404	447	197	233
1983	158	138	167	161	137	133	269	518	524	222	255
Jan.	166	148	167	167	109	104	225	364	397	199	239
Feb.	165	143	167	166	118	114	227	381	395	194	232
Mar.	167	141	170	169	124	123	228	391	374	197	228
Apr.	168	134	169	171	134	132	242	427	434	206	233
May	163	125	172	165	135	125	238	437	434	203	231
June	151	128	166	163	136	122	233	435	425	194	222
July	148	138	166	157	141	131	251	476	477	211	236
Aug.	154	142	172	159	155	146	305	663	651	259	294
Sept.	157	152	172	159	151	147	333	756	736	257	298
Oct.	154	139	170	155	149	148	320	672	685	251	289
Nov.	153	133	167	152	149	152	317	615	634	248	281
Dec.	153	128	170	152	144	151	304	603	644	240	271
1984											
Jan.	153	129	177	153	144	138	292	623	692	222	255
Feb.	151	125	174	148	138	129	281	600	669	205	243
Mar.	155	127	176	151	149	132	304	664	720	216	252
Apr. ⁷	158	130	168	153	150	134	303	707	772	208	236

¹Hard winter ordinary protein, f.o.b. Gulf ports. ²F.o.b. Buenos Aires. ³Western red spring 13.5% protein, in store Thunder Bay. ⁴July-June crop year, standard white, f.o.b. selling price. ⁵F.o.b. Gulf ports. ⁶F.o.b. ex-mill. ⁷Preliminary.

relative to earlier years. Record coarse grain trade occurred in 1980/81, when flows reached almost 109 million tons, 17 percent larger than the estimate for the current year.

For the major coarse grain importing countries, 1983/84 looks very much like the previous year, except for China. Because of record production, China's coarse grain imports dropped from 2.5 million tons in 1982/83 to only 0.2 million this year. Prospects for large Chinese coarse grain purchases in the following year appear slim.

Major foreign exporters of feed grains have altered their trade patterns in 1983/84. Australian exports rebounded from drought-devastated 1982/83 and are expected to rise substantially to 4 million tons. Larger Argentine produc-

tion is allowing an expansion in exports. The major development among the foreign exporters was in South Africa, which is becoming a major net coarse grain importer because of drought-reduced production. [Jim Cole (202) 447-8857]

Oilseeds

The 1984/85 world oilseed production prospects should improve compared with 1983/84. This year's high prices and tight stocks for oilseeds and vegetable oils will likely encourage larger global production. This could lead to lower prices in 1984/85 and promote consumption. Soybean meal consumption, which has been reduced by high prices relative to grains, may increase over 1983/84.

Soybeans and products: World production, consumption, and net exports¹

Country	1981/82			1982/83			1983/84 ²		
	Prod.	Cons.	Net exports	Prod.	Cons.	Net exports	Prod.	Cons.	Net exports
<i>Million metric tons</i>									
Soybeans									
Major exporters									
U.S.	54.44	28.03	25.29	60.68	30.16	24.63	43.42	26.40	20.68
Brazil	12.84	12.83	-.40	14.75	13.68	1.14	15.60	12.60	1.40
Argentina	4.15	1.34	1.88	3.57	2.11	1.42	5.00	2.80	2.80
Major importers									
EC-10	.03	11.69	-12.01	.07	10.90	-11.41	1.00	9.88	-10.06
Japan	.21	3.56	-4.49	.23	3.85	-4.87	.21	3.95	-4.70
Spain	.01	3.20	-3.20	.01	3.04	-3.04	0	2.80	-2.80
Eastern Europe	.52	1.01	-.57	.67	1.35	-.76	.66	1.33	-.75
China	9.33	4.03	-.50	9.03	3.62	0	9.30	3.86	0
Mexico	.68	1.50	-.57	.55	1.45	-1.07	.62	1.75	-1.30
Taiwan	.01	1.01	-1.17	.01	1.02	-1.27	.01	1.07	-1.20
USSR	.45	1.71	-1.51	.49	1.52	-1.25	.50	1.57	-1.30
Residual	3.63	4.79	-2.75	3.88	5.44	-3.52	3.32	5.53	-2.77
World	86.30	74.82		93.94	78.14		79.64	73.54	
Soybean meal									
Major exporters									
U.S.	22.36	16.09	6.27	24.24	17.52	6.45	21.20	15.69	5.08
Brazil	9.95	2.05	8.35	10.60	2.29	8.24	10.09	1.98	7.90
Argentina	1.03	.21	.74	1.69	.19	1.50	1.93	.20	1.94
Major importers									
EC-10	9.41	16.38	-7.01	8.71	15.31	-6.63	7.81	14.67	-6.76
Eastern Europe	.79	3.98	-3.19	1.08	3.82	-2.75	1.06	3.81	-2.77
USSR	1.30	2.68	-1.38	1.16	3.79	-2.63	1.20	3.20	-2.00
Portugal	.41	.45	-.03	.52	.39	0	.40	.31	0
Japan	2.78	2.93	-.10	3.00	3.18	-.23	3.07	3.23	-.15
Mexico	1.19	1.37	-.04	1.12	1.17	-.18	1.12	1.35	-.00
Residual	10.23	13.43	-3.61	10.00	13.36	-3.77	9.82	13.40	-3.24
World	59.45	59.57		62.12	61.02		57.70	57.84	
Soybean oil									
Major exporters									
U.S.	4.98	4.33	.94	5.46	4.47	.92	4.94	4.36	.75
Brazil	2.41	1.50	.84	2.56	1.65	1.10	2.45	1.58	.83
Argentina	.22	.08	.12	.35	.07	.26	.41	.08	.38
EC-10	2.02	1.49	.44	1.90	1.49	.47	1.66	1.37	.41
Spain	.54	.10	.48	.52	.09	.42	.45	.09	.39
Major importers									
India	.07	.49	-.42	.08	.48	-.40	.11	.61	-.50
Pakistan	0	.32	-.32	0	.25	-.24	0	.16	-.35
Eastern Europe	.18	.29	-.12	.24	.47	-.23	.23	.36	-.13
Iran	.01	.36	-.35	.01	.36	-.35	.01	.33	-.30
Morocco	.01	.18	-.18	0	.17	-.16	0	.17	-.17
Residual	2.60	3.93	-1.43	2.66	4.12	-1.79	2.70	4.26	-1.31
World	13.04	13.07		13.78	13.62		12.96	13.37	

¹For soybeans, consumption refers to crush. ²Forecast.

Production in 1984/85 Likely To Increase

World production in 1984/85 could increase to 182 million tons. U.S. soybean, Canadian rapeseed, and other oilseed crops are likely to expand. The poor U.S. crop in 1983/84 was a result of the drought, and partly an indirect result of the 1983 PIK programs for other crops. U.S. acreage in 1984 is expected to increase, perhaps even more than planting intentions indicated, and slightly above-average yields are expected. The U.S. oilseed output may reach 64.5 million tons in 1984/85. Canada's rapeseed crop is likely to expand in response to high prices, tight stocks, and strong export demand.

World production of oilseeds for 1983/84 is estimated at 165.4 million tons, down nearly 8 percent from the prior year. Soybean production, at 80.3 million tons, is forecast down 14 percent. Most of this decline comes from a poor U.S. outturn. South American soybean supplies rose 15 percent to 21 million tons, partially because of record Argentine production.

1984/85 Meal Use May Rebound

Soybean meal use for 1983/84 is expected to decline 5 percent, with the largest declines in the United States, Soviet Union, and the EC. Smaller supplies for crush and reduced meal output are constraining U.S. consumption. The Soviet Union, once expected to continue its rapid growth in protein meal use of prior years, may show about a 10-percent drop in 1983/84. Large fodder crops and grain imports may prompt the lower use. In 1984/85, the Soviets are expected to add more soybean meal in their feed rations to improve feeding efficiency. The EC's meal use decline in 1983/84 can be directly related to high prices, and the more favorable prices for grains. And surplus EC wheat used for feed will rise about one-third to 20 million tons. For 1984/85, EC demand for protein meal may increase as price declines make soybean meal more competitive relative to grains in feed rations.

April Stocks Imply Smaller U.S. Supplies

U.S. soybean stocks as of April 1, 1984, were estimated at 20.5 million tons, 36 percent below a year ago. So, supplies for the remainder of 1983/84 will be less than previously expected. U.S. soybean exports are moving at a strong pace, but the reduced supplies should lead to strong prices and to a slowdown in exports later this year.

Southern Hemisphere Export Outlook Mixed

Increased production of soybeans in Brazil and Argentina will lead to greater soybean exports. However, to influence market prices, Brazil has at times imposed temporary limits on soybean and product exports, or at other times, suspended export registrations altogether.

Exports of soybean meal in 1983/84 for both Brazil and Argentina are forecast almost unchanged from a year earlier. Brazil's export restrictions, now lifted for soybean meal through July, may have hurt its ability to maximize export revenues. Brazil would fare better exporting soybeans and products in 1983/84 than 1984/85 if a favorable U.S. crop depresses prices.

U.S. Oil Demand Strong; Stocks Tight

As in previous economic recoveries, U.S. edible oil demand is strengthening. This year, reduced supplies will constrain use. Earlier in 1983/84, soybean oil use was slow because of U.S. palm oil imports, and relatively large lard and tallow supplies. Malaysia's reduced palm oil output and low stocks tightened palm oil supplies on world markets. U.S. cattle slaughter will decline sharply in coming months causing tallow output to drop. Cottonseed oil supplies are also down sharply. Soybean oil will be virtually the only oil to fill domestic needs for the remainder of 1983/84.

Soybean oil exports from Brazil will decline because of larger domestic needs and limited domestic available supplies. Already, Brazil has imported small quantities of vegetable oils from Argentina.

Export demand for U.S. soybean oil has remained strong, despite high prices. Prices in October-March 1983/84 rose two-thirds, compared with a year earlier, and may strengthen further in coming months as domestic needs compete with export demand. Reduced Malaysian palm oil production caused palm oil prices in Europe to double. In calendar 1984, India is expected to import more soybean oil as a percentage of total oil imports compared with a year earlier. U.S. shipments to India are up substantially. And Pakistan's devastated cotton crop, and so its cottonseed outturn, has led to greater imports.

Production of vegetable oils may grow in 1984/85. More oilseeds combined with some gain in Malaysian palm oil output are projected. If the production gains depress prices, some consumption growth can be expected, following the slowdown in use this year. However, U.S. soybean oil exports may fall below 1983/84 because of strong U.S. demand and little gain in available supplies. [*Jan Lipson (202) 447-8855*]

Meat

Global meat output rose almost 2 percent in 1983, but little, if any, gain is expected this year because of rising feed costs and weak demand. Most of last year's gain was because of increased U.S. production. But high feed costs and poor returns to U.S. producers in 1983 will result in lower beef and pork output this year, particularly in the second half. Slow economic growth will keep consumer demand for meat sluggish in most foreign countries. Foreign production is expected to grow around 1 percent.

Little Gain for Beef and Veal

Beef and veal production should show little gain over last year. Although output in the United States and Oceania will decline, increases in the USSR and EC will be offsetting. Exports are forecast to be up in 1984 mainly because of larger shipments from the EC and Brazil.

Lower U.S. production is expected mainly because of reduced cow and nonfed beef slaughter in second-half 1984. U.S. beef and veal imports will contract this year, while exports expand. The trigger level for imports under the Meat Import Act, at 1,228 million pounds, is slightly below last year, and the output of major sup-

Beef and veal production

Country	1981	1982	1983 ¹	1984 ²
<i>1,000 metric tons</i>				
United States	10,353	10,425	10,748	10,564
Canada	1,016	1,032	1,036	1,010
Mexico	1,271	1,381	1,229	1,318
Argentina	2,929	2,579	2,440	2,520
Brazil	2,250	2,400	2,400	2,400
France	1,834	1,698	1,797	1,797
Germany, Fed. Rep.	1,535	1,471	1,487	1,514
Italy	1,111	1,107	1,149	1,148
Total EC-10	6,933	6,601	6,863	6,959
Eastern Europe	2,317	2,454	2,411	2,335
USSR	6,627	6,618	6,900	7,200
Australia	1,420	1,677	1,389	1,366
Other	5,599	5,664	5,674	5,541
Total	40,715	40,831	41,090	41,213

¹Preliminary. ²Forecast.

pliers is down. U.S. exports will rise about 6 percent, partially because of the new beef agreement with Japan. Japan, the largest U.S. market, will increase its quota for high-quality beef during the next 4 years to 58,400 tons, compared with the present 30,800.

Production in the EC rose 4 percent in 1983, but growth should slow this year. Increased slaughter because of the new dairy policy (designed to reduce surpluses) probably will not show up until the end of this year. Any larger dairy slaughter will likely be diverted into intervention stocks, which are growing by leaps and bounds. These stocks almost doubled during 1983, to 370,000 tons, and could go to 600,000 by the end of 1984. Subsidized exports from these stocks are alarming other exporters, especially Australia and Latin America.

Argentina may show a small increase in production while output in Brazil stagnates. Argentine exports could drop as domestic consumption expands, but Brazil may increase its exports 10 to 15 percent. Australia and New Zealand are forecasting lower supplies in 1984, and their exports may decline 8 percent.

Output in the Soviet Union was up 4 percent in 1983, because of better feed and forage supplies. If favorable conditions continue through the summer, output could gain another 4 percent this year.

Poultry Output Continues Upward

Production of poultry meat could rise 2 percent in 1984, as it did last year. Worldwide recession and dramatically higher feed prices have slowed growth. Global exports were stagnant last year and are forecast to decline in 1984 because of increased production in some of the major Middle East importers. This weaker export demand, along with steeper feed costs, has caused a price/cost squeeze in the major exporters (Brazil and France). Thus, production in France is forecast to increase marginally this year, and Brazil's output may decline.

U.S. poultry output grew 2 percent last year, and with lower competing meats supplies, should grow about the same in 1984. Exports, however, continue to drop. A number of countries have placed restrictions on U.S. poultry from avian flu affected areas, but in total this

Poultry production

Country	1981	1982	1983 ¹	1984 ²
<i>1,000 metric tons</i>				
United States	6,984	7,037	7,185	7,305
Canada	527	527	529	532
Mexico	533	561	536	557
Brazil	1,491	1,591	1,580	1,490
France	1,236	1,330	1,278	1,283
Total EC-10	4,145	4,368	4,259	4,309
Eastern Europe	1,959	1,754	1,803	1,843
USSR	2,255	2,425	2,500	2,650
Japan	1,134	1,209	1,279	1,315
Other	3,301	3,383	3,499	3,540
Total	22,329	22,855	23,170	23,541

¹Preliminary. ²Forecast.

will have minimal effect. A more potentially vexing problem is increased competition from Brazil and France in the Japanese and East Asian markets.

Pork Production Down

Pork production is estimated to be down 1 percent in 1984, after increasing 3 percent last year. Most of the increase in 1983 was in the United States, the USSR, and the EC, but only the USSR is expected to have larger 1984 output. While 1983 exports of pork rose dramatically, little gain is forecast for 1984.

In the United States, producer profits were cut in 1983 by both lower hog prices and higher feed costs. If farrowing intentions for this year are realized, output will be sharply lower after mid-1984. So output for the year is expected to be down 6 percent.

Production in the USSR grew around 4 percent in 1983. Higher inventories and supplies of good-quality feed may ensure even stronger growth this year. In Eastern Europe, higher production in most countries offset last year's declines of 8 percent in Poland and 6 in Yugoslavia. This year, Poland's output will continue to shrink, along with that of many of the other countries.

In the EC, higher feed prices, low profits, and market saturation limit output. Although some countries expect improved returns later this year, other major producers, such as West Germany, have seen the hog/feed price

Pork production

Country	1981	1982	1983 ¹	1984 ²
<i>1,000 metric tons</i>				
United States	7,199	6,454	6,894	6,501
Canada	869	833	852	870
Mexico	1,088	1,233	1,195	1,239
Germany, Fed. Rep.	2,700	2,670	2,726	2,805
France	1,640	1,610	1,601	1,605
Netherlands	1,149	1,165	1,185	1,200
Total EC-10	9,466	9,416	9,679	9,657
Eastern Europe	6,625	6,408	6,477	6,204
USSR	5,220	5,265	5,550	5,900
Japan	1,396	1,427	1,429	1,460
Other	5,017	5,179	5,373	5,393
Total	36,880	36,215	37,449	37,224

¹Preliminary. ²Forecast.

ratio fall to extreme lows. West German producers are mostly small family operators who do not respond quickly to market changes. Thus, production declines are not expected until later this year and in 1985. Pork exports from the EC should gain in 1984 as importers have lifted their ban on Danish exports, which had been imposed because of an outbreak of hoof-and-mouth disease. [*Linda M. Bailey (202) 447-4863*]

Dairy

Output Expansion To Slow

World production of milk and dairy products is continuing to expand in 1984, but the growth is expected to be less than in 1982 and 1983. The main reason is new supply control measures introduced in some of the major producers, especially in the EC and the United States.

In the United States, total milk production in calendar 1984 is expected to decline 3 to 5 percent from the record 63.5 million tons last year. The lower output will result from reduced marketings by participants in the new dairy diversion program, and increased feed costs and lower support prices. Cow numbers in 1984 are expected to average 3 to 4 percent below last year. Although the diversion program will promote cullings of less efficient cows, the U.S. average output per cow is not expected to increase, because participants are lowering output per cow to meet the required production cutbacks.

The EC recently announced an even more drastic supply control program. It has established a 5-year quota on deliveries to dairies at 99.2 million tons for 1984/85 and 98.4 million for the remaining 4 years. In comparison, the 1983 deliveries were a little under 104 million tons. The cutback will be the sharpest in West Germany, Netherlands, and the U.K. The quotas will be enforced via a "superlevy" on over-quota deliveries, 75 or 100 percent of the target price depending on how the quotas are established. Although the member-country quotas have been announced, it will probably take some time for the quotas to be established on the individual farms or dairies. This, along with higher output prior to adopting the new program, will mean calendar 1984 milk production will not show the drop implied by the announced quotas.

Among the other major producers, Eastern Europe is the only area expected to show a sharp decline. Brazil, India, Australia, and the USSR all are likely to register significant increases in 1984. While much will depend on this summer's feed and fodder crops, the USSR's January-March milk output on State and collective farms (up 1 million tons) indicates 1984 may reach 100 million tons. This would be a dramatic turnaround from the 89 million produced only 3 years earlier. [*Gerald Rector (202) 447-8912*]

Sugar

Consumption Up in 1983/84

Revisions in USDA's world sugar consumption series indicate that 1983/84 consumption could reach 95.7 million tons, about 1 million above estimated output.

Production To Rise in 1984/85

Early forecasts of 1984/85 centrifugal sugar output indicate a world total of 99.8 million tons, raw value. This is 5 percent above the 1983/84 estimate of 94.7 million, but 1 percent below the revised 1982/83 estimate of 101.1. Growing conditions are improved over last season. Sugar cane area for centrifugal sugar production may be only slightly larger than in 1983/84, and sugarbeet area is overall unchanged. In the EC, however, 1984 beet-planted acreage is up about 3 percent, with every major country except Italy showing some increase. EC output is expected to rise 13 percent.

In other West European countries, beet sugar output is likely to remain unchanged. East Europe is forecast to produce less sugar because of an 8-percent decline in Poland's outturn. Soviet sugar output may decline only slightly from 1983/84's unusually good outturn of 8.7 million tons.

Sufficient sugarcane is available to expand centrifugal sugar output in Brazil. However, the Brazilian Sugar and Alcohol Institute has called for a 0.5-million-ton reduction in output, to 8.9 million, because of low world prices and the need to avoid export subsidies.

In Asia, the six largest sugar-producing countries all expect increases in output. India's output is forecast at 9 million tons, 21 percent higher than in 1983/84, when poor weather reduced output. China's sugar output is forecast to continue its upward trend, rising 5 percent.

Prices Fall

World sugar prices declined 1 cent between January and April, to 5.95 cents a pound (f.o.b. Caribbean). Prices averaged 8.5 cents a pound in 1983. World sugar consumption is forecast to rise less than 2 percent in 1984/85, to 97.3 million tons or about 2.5 million below forecast production. The anticipated addition to world stocks suggests no price improvement through 1984. Negotiations toward a new International Sugar Agreement (ISA) will be continued June 12 in Geneva. The current ISA is scheduled to end December 31. [*Robert Barry (202) 447-7290*]

Cocoa and Chocolate

Production Below Consumption Needs

Cocoa bean production during the 1983/84 (October-September) season is forecast (February estimate) at 1.58 million tons, 3.4 percent greater than last year's poor outturn of 1.52 million. Output in Africa (54 percent of world production) increased 1.2 percent. Production in South America (30 percent of world total) rose 4.5 percent, and in Asia and Oceania (9 percent of total), the rise was 20 percent. Output was down 3 percent in North America. Dry weather in Africa and Brazil limited this year's global increase.

The world cocoa bean grind is forecast at 1.62 million tons in calendar 1984, down slightly from last year's record 1.64 million, reflecting higher prices and continued expansion in manufacturers' use of cocoa substitutes and extenders. Cocoa use increased during 1978-82,

largely in response to declining prices. The grind was up in calendar 1983 in most countries of the EC and Canada, reflecting better economic conditions. The grind was down in the United States as imports of semiprocessed consumer products increased. The February forecast indicated world cocoa stocks would be reduced another 60,000 tons, following a 130,000 reduction in 1983. However, current estimates indicate that the stock reduction could match the 1983 drawdown.

1983/84 Prices Higher

New York cocoa bean prices (the average of daily closing prices for the nearest 3 active futures trading months on the Coffee, Sugar, & Cocoa Exchange, Inc.) averaged 92 cents a pound in calendar 1983, up from 74 cents in 1982. Prices rose rather sharply in December and reached a peak of \$1.15 in January. Prices eased slightly in February, but increased to \$1.13 a pound in March and April, and averaged \$1.18 during the first half of May in reaction to reports of a poor midcrop in Brazil. The midcrop is harvested during May-September and usually accounts for 60 percent of the Brazilian crop. Early prospects suggest the 1984/85 cocoa crop will increase from 1983/84. If this occurs, world cocoa prices could weaken as the fall harvest approaches.

The International Cocoa Council attempted to negotiate a new International Cocoa Agreement (ICCA) during May 7-25, in Geneva. The ICCA is scheduled to expire September 30, 1984, but if a new agreement cannot be negotiated, the current agreement seems likely to be extended. [Fred Gray (202) 447-7290]

Cotton

World cotton production is projected sharply higher in 1984/85, with large increases in the United States and

several major producing countries. With stronger economic growth expected, consumption may increase about 2.7 percent—slightly above trend. However, importers may not increase demand as much as producers increase production, and trade may increase slightly. U.S. exports will face stiffer competition and may fall 1.5 million bales below the 7.0 million expected in 1983/84.

1984/85 Production Up

In 1983/84, cotton production is expected to about match 1982/83, as increased production in China offsets smaller U.S. and Pakistan output. In 1984/85, however, the United States and Pakistan may recover strongly, China's production will remain large, and several other countries, particularly in the Western Hemisphere, may increase production. So global 1984/85 production may rise nearly 9 percent, with foreign production projected at 62 million bales, about on the long-term trend.

Consumption To Grow in 1984/85

After increasing about 2.5 percent in 1983/84, world mill use may accelerate modestly in 1984/85 to 2.7 percent, reaching approximately 71.2 million bales. China's use is expected to keep expanding faster than other major consumers.

Cotton Trade Increasingly Competitive

Prospective 1983/84 foreign exports are the smallest in more than two decades, because of tight supplies in Pakistan, the USSR, Mexico, Brazil, and India. China has begun to export substantial quantities of cotton, but has met resistance because of quality control, shipment delays, and unusually small bales. Nevertheless, in 1984/85, China can be expected to increase its exports, possibly vying with Pakistan as the world's third largest

Cotton: World production, consumption, and net exports¹

Country	1982/83			1983/84			1984/85 ²		
	Prod.	Cons.	Net exports	Prod.	Cons.	Net exports	Prod.	Cons.	Net exports
<i>Million 480-lb. bales</i>									
Major exporters									
United States	12.0	5.5	5.2	7.8	5.9	7.0	11.5	5.7	5.5
USSR	11.9	9.2	2.9	12.5	9.3	3.0			
Pakistan	3.7	2.4	1.3	2.1	2.3	-.2			
Egypt	2.1	1.4	.9	1.9	1.4	.8			
Turkey	2.2	1.6	.7	2.4	1.8	.6			
Central America	.8	.1	.7	.7	.1	.6			
Sudan	.9	.1	.6	.9	.1	.8			
Brazil	3.0	2.6	.8	2.3	2.4	.1			
Mexico	.8	.6	.4	1.0	.5	.5			
India	6.3	6.3	.6	6.3	6.4	.3			
Major importers									
Western Europe	.7	5.5	-4.9	.8	5.6	-4.7			
Japan	—	3.3	-3.1	—	3.2	-3.2			
Eastern Europe	.1	3.3	-3.2	.1	3.3	-3.3			
South Korea	—	1.6	-1.6	—	1.6	-1.6			
Taiwan	—	1.1	-1.0	—	1.1	-1.1			
China	16.5	16.2	-.9	21.3	17.2	+4			
Hong Kong	—	.7	-.7	—	.8	-.9			
Residual	6.4	6.1	+1.3	7.5	6.3	+9			
World	67.4	67.6		67.6	69.3		73.5	71.2	

— = negligible. ¹Year beginning August 1, consumption is mill use. ²Forecast.

exporter. Exportable supplies may expand in 1984/85 for most foreign exporters as well. Because of the increased competition, U.S. exports are likely to contract from 1983/84's above-trend exports of 7 million bales to about 5.5 million—just slightly below the 5-year average. In May 1984, for the first time in over a year, no U.S. price quotes were competitive enough in Europe to be included in the weekly "A index." In 1984/85, this may continue because low stocks more than offset increased U.S. production, leaving forecast supplies below a year earlier. [Edward W. Allen (202) 447-8133]

REGIONAL DEVELOPMENTS

United States

Spring is late this year, but there is plenty of moisture for germination and for getting crops off to a good start. More acres will be planted to most crops, but it will be midyear before much is known about prospects of harvest yields. So with a normal summer, crop production in 1984 likely will be large enough to provide 1984/85 domestic and export needs and to rebuild stocks from the lows indicated for feed grains, oilseeds, and cotton at the end of the current season. Wheat stocks, however, will likely remain burdensome. Feed grain and wheat prices will settle toward the loan rate as larger harvests are completed this fall. Soybean prices will decline but stay well above the loan rate.

Livestock feeders have made substantial adjustments to high feed costs by putting fewer cattle on feed in the Corn Belt, while in the Southern Plains they have increased placements because of competitive wheat prices. So feed grain supplies appear large enough to support expected feeding this summer without a sharp price runup. More stability for feed prices is beneficial to livestock and poultry producers who have felt the brunt of the crop supply adjustments, which the huge 1981 and 1982 crops necessitated.

Low returns for feeders in 1983 and early 1984 will result in less meat in the second half of the year. Beef production may be off 5 percent from a year earlier, because of a sharp decline in slaughter of cows and nonfed steers and heifers, and a small cut in fed cattle marketings. Pork production could be off 10 to 12 percent. Broiler producers will increase output about 5 percent, partially offsetting declines in other meats. Having less meat in the market when consumer incomes are rising will boost second-half livestock prices well above a year earlier. However, prices may not be much higher than in the spring, except for hog prices, which will increase this summer.

Retail meat prices have been rising since last fall, and will continue through the end of the year, but increases in the fall will be small. Price gains for pork will lead the advance. Because meat prices declined during 1983, retail meat prices this fall will be 10 to 15 percent above a year earlier. Meanwhile, retail prices of other foods will also be rising faster this year. For all of 1984, food prices are expected to run 4 to 7 percent higher than in 1983. Last year's increase was just over 2 percent and was the slowest increase since 1967.

The farm income picture is mixed. Cash receipts will nudge higher, but with more acres in production and moderate inflationary pressures, farm expenses will also increase in 1984. Net cash income could decline somewhat during 1984. However, the traditional measure, net farm income, which includes any change in the value of the inventory, indicates a substantial rise to \$31 to \$36 billion, up from about \$20 billion in 1983. [Donald Seaborg (202) 447-8376]

Canada

Wheat Area To Fall in 1984

Canadian crop area will continue high in 1984, but wheat area will likely fall for the first time in 3 years, according to Canada's spring planting intentions report. A decline in wheat area was expected; export movement has slowed since the brisk pace of last fall, and carryover stocks, especially of high-quality wheat, will grow. In addition, the Canadian Wheat Board lowered initial prices to farmers 6 percent for spring wheat and 11 percent for Durum, to reflect depressed world prices.

Area planted to coarse grains and oilseeds will expand in 1984, although low soil moisture may keep barley and rapeseed area below earlier expectations. After being raised in midyear for the 1983/84 season, initial prices were lowered only 5 percent for barley and oats, sending farmers a more positive economic signal for coarse grains than for wheat. Coarse grain exports are running 20 percent ahead of last year and ending stocks will be very low. Rapeseed and flaxseed exports are also strong; exports and prices are currently one-third higher than last year.

Dry Conditions Prevail

Western Canada had a warm, dry winter and much of the snow cover melted before the moisture could penetrate the soil. Southern Saskatchewan and Alberta remain quite dry, and pasture conditions are also a concern in parts of Alberta. If the dryness persists, wheat plantings could increase at the expense of other crops; summer fallow acreage could also increase, reversing the declining trend. But timely rains in the right areas could bring an increase in rapeseed area. The dryness may allow seeding to be completed earlier than in the past 2 years, which were marked by cool, wet springs.

Even though current weather conditions suggest yields may only be average or lower, exportable wheat supplies will continue large. As in the past 2 years, the Wheat Board will face low prices and sluggish demand for exports.

Barley supplies available for export are likely to drop, because of low ending stocks in 1983/84. Low supplies could cause lower domestic use and exports in 1983/84. The rapeseed supply could ease a little in 1984/85. If a 3-million-ton crop materializes, increases in both domestic consumption and exports could follow.

Pork Exports to the United States Up

Canadian exports of pork and live hogs to the United States have grown significantly in recent years, and the

trend is accelerating. Canadian live hog exports more than doubled in the first quarter of 1984 from a year ago. The recent surge reflects a reduction in exports of pork to Japan and reduced slaughter capacity in Ontario, thus making more supplies available for the U.S. market. Also, the continuing slide of the Canadian dollar makes Canadian pork even more attractive to U.S. buyers. [Carol Goodloe (202) 447-8378]

Western Europe

Western Europe's agricultural production will likely rise significantly in 1984, with both grain and livestock setting records. The EC recently took several actions to restrain future growth in agricultural surpluses and expenditures. These include initiating delivery quotas on milk, subsidizing feed use of bread-quality wheat, and restraining commodity price-support increases for 1984/85. A strong U.S. dollar, high prices, weak demand, and increased competition, as well as prospects for a good grain crop in Western Europe are adversely affecting U.S. agricultural exports to Western Europe in 1984.

Record Farm Output Anticipated

Western Europe's agricultural production will probably rise significantly in 1984. Grain production is expected to resume its upward trend after 1983's reduced crop. Weather has been excellent, and near-record yields are forecast. Area will likely be 1 to 2 percent more than last year's plantings and slightly above the 1982 record.

Output of livestock products is expected to increase as well. Economic recovery will encourage producers to expand livestock output, but continued low profits will likely limit the increases to somewhat less than in recent years.

EC Introduces Milk Delivery Quotas

The agricultural ministers approved a system of milk delivery quotas designed to constrain production. The 1984/85 quota is 99.2 million tons, plus a reserve of 335,000 divided among Ireland, Northern Ireland, and Luxembourg. Together, the quota and reserve equal 99.6 million tons, 4 percent lower than 1983 deliveries. The cutback in deliveries falls mostly on West Germany, Netherlands, and the U.K. The quota is to fall to 98.4 million tons for the remaining 4 years of the 5-year program, although the unspecified reserve, if used, could change this figure.

Milk deliveries above the quota will be subject to a levy (tax) equal to 75 percent of the target price for milk, if the quota is applied at the farm level, or 100 percent if applied at the dairy processing plant. The price for milk deliveries falling within established quotas will be supported through intervention purchases of butter, nonfat dry milk, and selected cheeses.

Higher Feed Wheat Use Cuts Stocks

The EC's programs to reduce wheat stocks have had some success. A program to move 2 million tons of bread wheat into feed was not fully subscribed, but depressed market prices sufficiently to shift wheat into feed use.

The EC's 1983/84 use of wheat for feed is estimated at slightly over 20 million tons, about 5 million above last season. Although feed use of wheat is expected to be up in all the EC countries, about 70 percent of the increase will be in the U.K., France, and West Germany.

The large increase in feed use of wheat comes primarily from relatively weak wheat prices at a time of fairly tight barley supplies. The higher feed use has helped to cut ending stocks to an estimated 9.2 million tons this season, compared with 11.3 million last year. However, the chance for a record 1984 wheat crop over 60 million tons and prospects for a much larger barley crop than in 1983 will reduce the demand for wheat for feed and complicate surplus disposal.

Budget Constrains EC Price Supports

The EC Council of Ministers took an unprecedented step to restrain burgeoning agricultural expenditures. They reduced support prices an average of 0.5 percent (in ECU's) for a broad range of commodities. However, after conversion to national currencies, support prices will increase an average 3.2 percent, because of adjustments in Monetary Compensatory Amounts and a 3-percent revaluation of the ECU for use in agriculture. The real prices farmers receive will decline, however. Despite the restricted prices, projected expenditures on agriculture will exceed 1984 budget allocations, and the EC will have to arrange for supplemental financing.

U.S. Exports Stagnate in 1984

Despite higher unit prices, the value of U.S. agricultural exports to Western Europe is expected to stagnate in 1984. Exports are forecast at \$10 billion, about the same as in 1983, but well below the \$12.4 billion record in 1980.

U.S. grain and oilseed exports to Western Europe are expected to be significantly below FY 83. Although the EC's 1983 grain production fell more than 8.0 million tons, grain imports will likely rise only marginally in FY 84, because of a drawdown of large carryover stocks (18.6 million). A 5-million-ton increase in the feed use of wheat and prospects of a good grain crop in 1984 have also lessened the demand for grain imports. The non-EC countries are also expected to import less grain because of increased production, reduced use, and a drawdown in stocks. U.S. grain exports to Spain and Portugal, the main importers in the group, will likely fall about 600,000 tons from FY 83.

U.S. soybean exports to Western Europe, which dropped 1.8 million tons in FY 83, are expected to decline another 3 million this year, with significant drops to both the EC and non-EC countries. High prices because of lower U.S. supplies and weak European demand for mixed feeds are responsible for much of the drop.

U.S. cotton exports to Western Europe may reach their highest in a decade because of a resurgence in the region's internal demand and growth in exports of textiles, as well as because of lower competition from traditional suppliers, such as the USSR. [Jim Lopes (202) 447-8289]

Australia

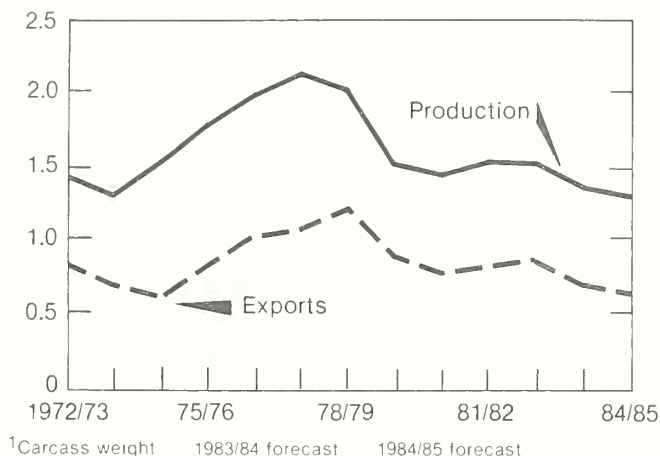
Beef Export Supply Remains Tight

Australia's cattle herd has declined to its lowest since the 1960's, and with poor returns to beef cattle, herd rebuilding is expected to be slow. Cattle slaughter may decline a tenth in 1984, but slaughter weights will be very high because of excellent pasture conditions over major grazing areas.

With an improving economy, consumer demand for beef is strengthening. Consumption will be maintained despite higher prices. Early indications point to continued low slaughter rates in 1985. Beef and veal production and exports may continue to decline.

Australian Beef and Veal¹

Mill. metric tons



USDA

Sheep Numbers Are On Upswing

Favorable prospects for lamb and wool sales caused sheep producers to begin rebuilding herds when the drought ended in the fall of 1983 (April-May). Adult sheep slaughterings fell off sharply and will likely remain low this year. Sheep meat production is expected to rise about 5 percent from 1983's depressed output. Both export and domestic demand are weak, so export volume will depend on relative prices on world and Australian markets. Mutton and lamb production will probably increase in 1985 as more typical slaughter rates return.

Wheat Plantings May Be Record in 1984

Because of plentiful rains over the spring and summer, most cropping areas have good subsoil moisture. With a reduced pasture requirement for livestock, many farmers will increase wheat plantings, and wheat area is expected to increase slightly to 12.8 million hectares. This increase is likely in spite of weaker price expectations. Yields are unlikely to approach last year's extraordinary 1.74 tons per hectare, and output is expected to decline from 22 million tons to about 17 million.

The Australian Wheat Board has sold a large part of the weather-damaged wheat from the 1983/84 crop, and

wheat exports are forecast at 14 million tons, second only to the 1979/80 record. Nevertheless, carryout stocks will likely reach 8 million tons. Export supplies will remain abundant in 1984/85, and Australia will be an aggressive competitor. [Sally Byrne (202) 447-8376]

Japan

U.S.-Japan Beef and Citrus Agreement

The United States and Japan finally reached agreement on expanded quota levels for high-quality beef and citrus products at talks held in Washington, D.C., April 4-7, 1984. The new agreement settles, at least temporarily, the long-standing U.S.-Japan dispute over beef and citrus that had become the key trouble spot in their agricultural trade relations. Japanese quotas on beef and citrus had also come to symbolize the closed nature of Japan's market for imported goods.

The previous framework for beef and citrus imports, negotiated during the Tokyo Round of the Multilateral Trade Negotiations (MTN), expired at the end of March 1984. Under the new agreement, in effect from Japan's FY 84 (April-March) through 1987, Japan's imports of high-quality beef will be increased 6,900 tons annually. This is about twice the rate of increase under the previous arrangement. Imports of high-quality beef, set at 30,800 tons for FY 83, will grow to 58,400 tons by 1987/88. High-quality beef refers to grain-fed beef, most of which the United States supplies. Because of the expanded quotas, U.S. beef sales to Japan will increase an estimated \$30 million in 1984/85, and will be an estimated \$120 million above current levels by 1987/88.

Orange imports will be expanded 11,000 tons a year, bringing total imports to 126,000 tons by the fourth year of the agreement. Because it supplies nearly all of Japan's fresh orange imports, the United States stands to gain an estimated \$7 million in increased orange sales in 1984/85, or a \$26-million increase over current sales by the final year. In addition, imports of orange juice will be upped 500 tons annually and grapefruit juice will be liberalized starting April 1986. The United States will benefit more from expanded imports of grapefruit juice where it faces less competition. In recent years, Brazil has all but taken over the Japanese import market for orange juice.

U.S. Feed Grain Sales Up Sharply

U.S. agricultural exports to Japan this fiscal year are expected to be up more than \$1 billion from FY 83's \$5.9 billion, led by large increases in shipments of feed grains. U.S. corn exports to Japan could reach a record 13.6 million tons, while U.S. exports of barley and sorghum are also forecast to be up. With the pace of soybean shipments slower this year, U.S. soybean exports are projected to fall below FY 83's record 4.7 million tons. In contrast, U.S. cotton sales to Japan have been brisk, because of reduced supplies in other major cotton exporting countries, and will likely top the record 361,000 tons shipped in FY 82.

Most sectors of Japan's livestock industry are expected to show growth this year, aided by economic recovery. Reduced slaughtering will limit expansion of beef and

Japan: Production of major livestock products

Product	1982	1983 ¹	1984 ²	1983/ 1982	1984/ 1983
	1,000 metric tons			Percent change	
Beef and veal	481	495	483	2.9	-2.4
Pork	1,427	1,429	1,460	.1	2.2
Milk ³	6,750	7,030	7,250	4.2	3.0
Broilers	1,080	1,143	1,190	5.8	4.1
Eggs	2,057	2,085	2,085	1.4	0

¹Preliminary ²Forecast ³Fluid

veal production. But pork output will increase 2 percent, encouraged by strong demand for processed pork products. Broiler production will expand 3 to 4 percent. Milk output is expected to grow 3 percent, but no growth in egg production is anticipated.

Imports of livestock products are also expected to be up in response to stronger consumer demand. The new agreement on high-quality beef imports will foster greater imports of beef and veal. The U.S. share of Japan's pork imports is likely to decline some as Denmark regains its more traditional market share and as Taiwan continues to be an important supplier. The U.S. share of Japan's poultry market will fall because of inroads by Brazil—which is expected to ship between 7,000 and 10,000 tons in 1984—and because of stiffer competition from Thailand. [*Lois Caplan (202) 447-8860*]

USSR

Better fall planting conditions and a generally mild winter should put 1984's winter grain production higher than 1983's. But because the winter was drier, most grain-producing areas have low soil moisture reserves. So 1984 grain yields could be especially susceptible to dry periods.

Imports in 1984/85 should stay relatively large because grain-for-feed requirements are anticipated to remain record high, and the need to build stocks will continue. While wheat will account for most grain imports, corn imports may increase somewhat. The livestock sector should set new records this year, continuing the 1983 trend. Most nongrain crops are expected to gain.

Crop Prospects

The Soviets reported that 40 million hectares of winter crops were sown last fall, compared with the 37.5 million in 1982. Nongrain crops generally account for over 5 million hectares. So, sown-winter grain area was probably about 35 million hectares, compared with the 32.5 million estimated for 1982. The increase in 1983 fall sowings came primarily from improved soil moisture. Nearly all the increased area was probably sown to wheat. Some reseeding was necessitated, but overall reseeding requirements for grains were probably close to recent averages, amounting to about 11 percent. Surviving winter grain area may approach 31 million hectares, versus 28.6 million in 1983. Mid-April's mild temperatures allowed winter grains to resume development about a week earlier than usual in the northern areas. However, deficient subsoil moisture could threaten yields in the North Caucasus, eastern Ukraine, the Black Soil Zone, and Volga Valley.

Spring grain area will be down from 1983 because of the larger area of higher yielding winter grains, modest increases in arable land, and the current policy to increase fallow to 20-22 million hectares. The Soviets may be aiming to increase corn and pulse areas at the expense of spring wheat and barley areas. However, poor soil moisture in some key corn-growing areas may hamper growth. Weather favored seeding operations throughout most of European USSR. As of May 14, small grains had been seeded on 45.1 million hectares; this is behind 1983's rapid pace, but slightly ahead of the 1980-82 pace.

Prospects for most nongrain crops appear better than in 1983. May 14 seedings of sugarbeets, sunflowers, potatoes, and vegetables were behind 1983's fast pace, but faster than 1981 and 1982. Cotton planting got off to a slow start probably because of cool weather and possibly a delay in fieldwork from 1983's late harvest. By April 30, however, cotton planting was basically completed, a little later than in 1983 but ahead of 1981 and 1982. Most of these crops are expected to show gains in 1984. Sunflowerseed output may remain at the 1982 and 1983 level.

Livestock Sector Makes Strong Gains

Gains in the first 4 months of 1984 Soviet livestock inventories and production on State and collective farms continued at a record pace, following 1983's peaks. The marked improvement resulted from record feed availabilities, a mild winter, and the 1983 boost in Government prices for livestock and products purchased from farms. As of May 1, 1984, cattle (including cows), hog, and poultry numbers were records, rising 2, 3, and 2 percent, respectively, from a year earlier. Meat (liveweight), milk, and egg production during the first third of 1984 rose 8, 5, and 4 percent, respectively, over highs of a year earlier.

Continuation of current improvements in livestock production could result in record production of meat, milk, and eggs this year. Total meat production (carcass weight) could increase 4 percent over 1983's 16 million tons. Indications are, however, that forage crops may not be as good or abundant as in 1983. So continued inventory building and higher meat production could be more dependent on increased grain feeding, a reversal of the falling 1982/83 grain share in the total feed supply. A 2- to 3-percent gain in milk production is projected over 1983's 96.4 million tons. However, if the North Caucasus, Volga Valley, and the Central Black Soil Zone remain dry, problems in foraging and pasturing could ensue. This would stress dairy herds, possibly dampening projected 1984 milk production. The rate of growth in egg production during first-quarter 1984 slowed somewhat from a year earlier, but output reached a peak. Total output this year could rise 3 to 4 percent over 1983's record 74.7 billion units. [*Angel O. Byrne (202) 447-8380*]

East Europe

Despite the severe drought, farm production in 1983 declined only 2 to 3 percent. The prolonged drought principally hurt the fall harvested crops. Small grains and rapeseed harvested in the summer fared better than

corn, sunflower, potatoes, and sugarbeets. The region's overall trade performance improved. Plans for 1984 are for modest growth. Some increase in U.S. agricultural exports in U.S. fiscal year 1984 is likely.

East European Agriculture in 1983

Despite the drought, grain production—estimated at 100 million tons—was only 5 percent below the 1982 record. Oilseed production at 4 million tons roughly equaled the 1982 output. Sugarbeet production declined 11 percent, but sugar output did not decrease as much in 1983 because the beets had higher sugar content. An increase in Poland's potato harvest compensated for the shortfalls in most other countries of the region. Tobacco production was slightly higher than in 1982. In the livestock sector, cattle and hog inventories were up 2 percent; poultry, 3; and sheep, 4.

Data for agricultural trade is incomplete. The region's overall trade performance improved over 1982. All countries, except Yugoslavia, achieved a foreign trade surplus totaling \$4.5 billion. Their balance on the clearing account with the Soviet Union, however, deteriorated.

Outlook for 1984

The aggregate agricultural growth plans for 1984 range from no growth in Czechoslovakia to 6 percent in Romania. The relatively modest plans for 1984 consider the austerity measures, which restrict investments and imports throughout the economy. While the largest net importers of agricultural commodities, the GDR and Poland, strive for a higher self-sufficiency ratio, the southern countries wish to improve their agricultural trade balance.

Grain production remains a top priority: the ambitious plans for 1984 add up to 116.7 million tons, but under present crop conditions, a 95- to 105-million-ton harvest is more likely. The southern countries plan to expand corn area. Planners anticipate yield increases for all field crops. Next to grains, increases are planned in sunflower, sugarbeet, tobacco, rapeseed, pulses, hops, fruit, and vegetable production.

Livestock production growth is planned in conjunction with the growth potential of domestic feed production and foreign exchange allocation for imported feed. Officials, except in Poland and Bulgaria, are urging producers to shift from hog and poultry breeding to cattle and sheep, which use less concentrated feed.

The southern countries' agricultural trade is expected to be positive or nearly in balance. The region is expected to import 8.5 to 9 million tons of grain from all origins, an amount roughly equal to the reduced volume of 1983. Oilseed meal imports are likely to rebound from 3.3 million to 4.5 million tons. East European grain exports may exceed 4 million tons. Livestock product and live animal exports will continue, even if domestic meat shortages persist. Higher value processed meat exports from Poland are expected to compensate for the larger volume of lower quality raw meat imports.

U.S. Exports To Rise

U.S. agricultural exports to the region, of which usually more than 80 percent of the value derives from grain and oilseed products, are expected to rise in FY 84 to \$890 million from \$827 million in FY 83. CCC credits have been slightly diminished and none were granted to Poland and Romania, considerable credit recipients until 1981. Lower demand, intensified competition from other suppliers, and the East European hard currency shortage will keep U.S. farm exports to the region short of their annual average of \$1.6 million during 1976-81. To increase U.S. sales in FY 84, cotton, vegetable oil, and protein meal exports to Yugoslavia and Hungary have been promoted with \$233.5 million CCC credit guarantees. U.S. agricultural exports to Eastern Europe were \$394.5 million during October-March compared with \$363.3 million in October-March 1983. [Cynthia Taylor (202) 447-8380]

China

Gross value of agricultural output grew 9.5 percent in 1983. Grain, cotton, oilseed, meat, milk, egg, and aquatic output all posted records. The record production together with some improvement of internal transfer of grains resulted in lower demand for imported grain, and virtually ceased imports of cotton and soybeans. The preliminary outlook for this year's crops is good. U.S. agricultural exports to China, however, should be up in FY 84, because grain exports are expected to return more to normal.

Record Production in 1983

China's 1983 wheat output rose to a record 81.39 million tons, nearly 19 percent over the previous year's record. Rice production also surpassed the 1982 record crop and reached 118.2 million tons, a 4.7-percent increase. Good fall weather and expanded acreage of hybrid rice boosted yields of late rice crops that apparently more than offset a decrease in output of the 1983 early rice crop. China's wheat and rice outturn has grown significantly and now stands at 47.4 and 20.7 percent, respectively, higher than in 1980. Generally good weather also benefited coarse grain production, with output up to 93 million tons, 7 million over the previous year.

Cotton output reached 21.3 million bales in 1983, nearly 29 percent above the previous year. Yields rose 25 percent; slight expansion in area contributed only marginally to the increase of the 1983 crop.

Oilseed outturn grew to 28.62 million tons in 1983, about 1.6 million over 1982. Rapeseed production dropped to 4.287 million tons, 1.36 million down from the previous year. Increases in other oilseed crops, particularly cottonseed, however, offset the decline.

Crop Prospects Good for 1984

This year's crop production should be good again, with output for most crops close to 1983's. Ongoing structural changes in rural areas and increasing adoption of new technology in agricultural production will offset what looks to be somewhat poorer weather, at least at this ear-

ly stage of production. The wheat crop should be close to last year's record and is estimated to be 80 million tons. Rice production may exceed last year's excellent crop because of a slight increase in sown area and further expansion of hybrid rice. Coarse grain output in 1984 should also be up 2 million tons, reaching 95 million. Greater demand for feed grains in China is expected to continue, particularly around large urban centers. China has been fairly successful in raising food grain production in recent years. Increasing feed grain output to support expansion of the livestock sector will be the main task in coming years.

The 1984 cotton crop is expected to be about 20 million bales, 1.3 million bales less than the 1983 record. Area sown to cotton will be somewhat smaller. Oilseed output this year should be about the same as last year. Rapeseed area will decline further, but better yields should put the 1984 crop at around 4.4 million tons.

U.S. Agricultural Exports To Rise

U.S. agricultural exports to China declined from \$1.8 billion in FY 82 to only \$546 million in FY 83. The large drop occurred mainly because U.S. wheat exports were off substantially, falling from 8.2 million tons in FY 82 to only 1.9 million in FY 83. Also, exports of cotton and soybeans virtually ended during the year.

U.S. sales of agricultural commodities are expected to rebound in 1984. Although U.S. cotton, soybeans, and edible oil exports to China will likely remain negligible as in 1983, grain sales resumed following settlement of the U.S.-China textile issue. The U.S. share of the China grain market should return to more normal levels in FY 84. Agricultural exports for the year are now projected at \$800 million, up 48 percent. Nearly all will be grain. [Francis C. Tuan (202) 447-8676]

Asia

South Asian Food Grains Better

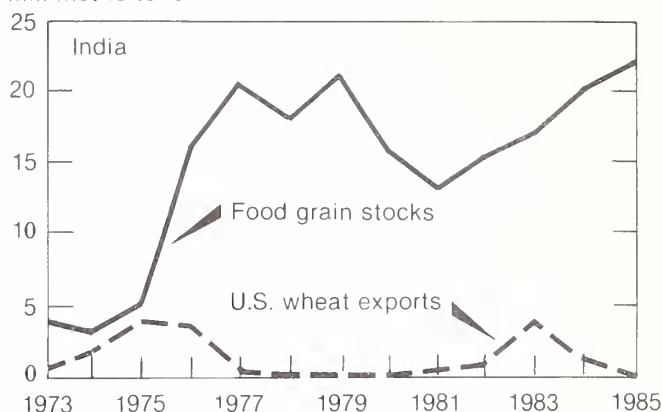
Generally, agricultural conditions in South Asia have improved since last year. Rice and wheat supplies are above their weather-reduced levels of 1982/83. Thus, U.S. wheat exports to South Asia in FY 84 will probably be off more than 50 percent from FY 83.

In India, farm output rebounded about 12 percent in 1983/84 following the 1982/83 drought. Food grain and oilseed harvests that benefited from good weather, strong price incentives, and reduced fertilizer prices led the gains. Growth in the farm sector in 1984/85 will depend heavily on the monsoon that begins in late June.

Food grain production in 1983/84 is estimated at 144.5 million tons, more than 8 percent above the previous record. The estimate includes record crops of rice (57 million tons) and wheat (44.6). Government rice procurement is forecast at a record 7.8 million tons, and wheat procurement from the 1984 harvest is projected at a record 8.8 million. These procurement levels, coupled with imports of 2.5 million tons of wheat and about 0.8 million of rice during 1983/84 (July/June), are expected to boost Government cereal stocks close to the 21.4-million-ton target by July 1984. Wheat stocks will

Food Grain Stocks and U.S. Wheat Exports

Mil. metric tons



USDA

exceed the target, but rice stocks will remain far below target because strong open-market rice prices have boosted demand for subsidized rice from the public distribution system (PDS).

With stocks near target, cereal imports in 1984/85 will depend primarily on the 1984 monsoon, and on the balance between domestic procurement and PDS offtake during the year. Current projections suggest that, with average or better rainfall, July 1985 wheat stocks will exceed the target without imports, while 0.5 to 1.0 million tons of rice imports will be needed to continue rebuilding rice stocks.

Oilseed production during 1983/84 is estimated at a record 15.7 million tons, 18 percent above 1982/83. With edible oil output rebounding 15 percent, imports of edible oils are forecast to drop from about 1.25 million tons in 1983 to 1.1 million in 1984. Purchases so far in 1984 have consisted primarily of more competitively priced soybean, rapeseed, and sunflower oils, but palm oil purchases are expected to pick up during June-December as Malaysian supplies improve. Imports for 1984 are now expected to consist of about 475,000 tons of soybean oil (compared with 500,000 in 1983), 370,000 of palm oil (620,000), 175,000 of rapeseed oil (130,000), and 70,000 of sunflower oil (0). U.S. exports of soybean oil to India have benefited from strong palm oil prices, with U.S. sales forecast at 175,000 tons in FY 84, compared with 54,968 in FY 83.

Pakistan's 1983/84 wheat harvest, completed at the end of May, is estimated at 11.5 million tons, down about 7 percent from last year and 13 percent below the Government's target. Drought in January and February hurt plant growth in rainfed areas, which account for 15 percent of production. Nevertheless, Pakistan should have adequate supplies of wheat to meet its domestic and export commitments. Pakistan's cotton imports from the United States are estimated at 155,000 bales, down from the previous estimate of 200,000 because of keener competition from other cotton suppliers.

Bangladesh's winter wheat crop has been revised upward to a record 1.15 million tons because of favorable weather and increased use of fertilizer. Information available

on the winter rice crop also suggests a record harvest of more than 3.6 million tons. Food grain production for 1983/84 is now projected at 16.0 million tons, up 4.2 percent over the previous year. Government stocks of rice remain low, however, because of low domestic procurement and continued large-scale public distribution of food grains. Food grain stocks as of July 1, 1984, are expected to be about 1.0 million tons, less than 4 weeks of consumption. To bolster stocks, the Government has complemented normal concessional imports with significant commercial purchases. Food grain imports in 1983/84 (July/June) are estimated at 2.3 million tons (1.86 million in 1982/83), including about 900,000 tons of commercial imports.

Sri Lanka's major rice crop (maha), harvested in February and March, is expected to be down about 15 percent, because of continuous and heavy rains in February in northern and eastern districts. In these areas, flooding affected about half of the maha crop. The Government is forecasting that maha rice output will be below both the 1.26-million-ton target and the 1.2 million produced last year. Sri Lanka's total rice crop may be down about 10 percent from last year's 1.5 million tons. Sri Lanka may import about 200,000 to 250,000 tons of rice during 1984 to meet domestic requirements, up from 157,000 last year.

U.S. Exports To S.E. Asia Steady

The billion-dollar U.S. market in Southeast Asia, mainly the ASEAN countries (Indonesia, Malaysia, Singapore, Thailand, Brunei, and the Philippines), will grow little, if any, this year, because good crops reduced grain imports and increases in cotton imports will only offset a 30-percent drop in the value of U.S. exports to the fiscally troubled Philippine market.

If the 1983/84 monsoon performs well, Indonesia's agricultural sector may register real growth of 4 to 5 percent in 1984. Overall 1984 rice output is expected to exceed 24.5 million tons, because of favorable weather, greater fertilizer use, increased plantings of pest-resistant seeds, and improved irrigation. Rice imports could drop to about 700,000 tons, down from 1.2 million (4.7 percent of domestic use) in 1983. Increased production of rubber, palm oil, and secondary food crops is also expected.

In Malaysia, agricultural output will likely increase 5 to 7 percent in 1984, mainly reflecting a sharp jump in palm oil production to 3.6 million tons. Gains in rubber, cocoa, rice, pork, and poultry are also expected. Prices for natural rubber, palm oil, palm kernel oil, cocoa, pepper, and sawn timber should average higher than in 1983. Imports of rice, wheat, and corn are expected to increase. The United States will likely export larger quantities of poultry meats, wheat, cotton, and fresh fruits to Malaysia in FY 84.

The Philippines continues to struggle with finances. Agreements with the IMF and commercial banks remain unsettled. In March, 350 creditor banks approved a third moratorium on principal payments of the foreign debt, but are delaying action on restructuring the debt and providing new funds until the IMF program is approved. Official support prices for several commodities have been raised to cover the higher production costs from peso

devaluation and foreign exchange shortage. Support prices for rice and corn, for example, were increased from 1,700 and 1,300 pesos a ton to 2,100 and 1,650 pesos, respectively.

During the current 1983/84 (September-August) sugar season, the Philippines, a traditional exporter, imported nearly 300,000 tons of sugar. Imports were made to overcome shortages in the domestic market, arising from drought-induced delays in the harvest, and to meet profitable long-term export commitments. The Philippines is expected to fill its FY 84 U.S. quota of 372,500 tons; 58 percent had been shipped by April. The outlook for 1984/85 is for output to reach 2.3 million tons, 12 percent above this year, despite a continuing down-trend in area planted.

Exports Increase to East Asia

U.S. agricultural exports to South Korea, Taiwan, and Hong Kong are expected to reach \$3.8 billion this fiscal year, a 15-percent increase over last year. These markets, like Japan, represent large and relatively stable markets for U.S. grains and other agricultural commodities. Economic recovery in East Asia and in its export markets should, with some exceptions, spur growth this year and next in the region's livestock and textile industries.

In Korea, hog prices since January have remained below the estimated cost of production, outweighing favorable producer prices for milk, beef, and poultry meat, and leading to reduced demand for animal feeds. Continued growth in demand for industrial corn has partially offset the negative effect on corn imports. U.S. feed grain exports to South Korea are expected to fall this year, but resume an upward trend next year.

Heavy winterkill and below-normal precipitation since November have led to expectations of a poor 1984 barley crop, which has caused the Government to suspend plans to channel official barley stocks into feed production. Imported feed grains would likely replace much of this barley.

Korea's Ministry of Agriculture and Fisheries is reported to be studying the feasibility of applying a variable levy to future grain and soybean imports, with the intention of bringing the import price up to the Government's farm purchase price for these crops. The difference would be used to promote domestic production of crops and livestock. If started, such a system would considerably cut livestock production, and feed grain and soybean imports. However, the proposal is likely to provoke heated opposition from livestock producers, consumers, and Government agencies concerned with restraining inflation and with maintaining the international competitiveness of South Korea's exports.

Taiwan is expected to import about \$1.6 billion of U.S. agricultural commodities during 1983/84, up from \$1.3 billion in 1982/83. Hong Kong is likewise expected to increase its purchases of U.S. agricultural products about \$80 million this year, to a total of about \$420 million, more than in recent years. This is still below 1979/80. Most of the expected increase is due to larger cotton purchases. [Bill Coyle (202) 447-8229]

Mideast and North Africa

Grain Crop Down

Middle Eastern and North African countries are likely to increase grain imports to 38 million tons in 1984, compared with 1983's 36.5 million tons. Although petroleum revenues and financial constraints have tempered growth in grain imports, demand is driven by the 2.7-percent annual population growth, subsidies that keep prices within the reach of the average family, and poor local production. The 38 million tons includes 8.5 million for Egypt, 6 million for Saudi Arabia, and over 3.5 million each for Algeria and Iraq. Credit from the United States, EC, and Canada has helped offset the financial constraints.

U.S. grain exports to the region may be between 12 and 13 million tons in 1984. So the region will be as important a market for American grain as the Soviet Union. But unlike sales to the Soviet Union, U.S. sales to this region have been relatively stable in the last 2 years.

Low Rains and Droughts Plague Region

The Middle East and North African grain harvest is forecast down from last year's nearly 47 million tons. Inadequate rain will reduce production in Turkey, Syria, Lebanon, Iraq, and Jordan, and has caused major droughts in Morocco and Israel.

Turkish wheat production is forecast at 13.1 million tons, down 2 percent from last year's low crop. Currently, Turkey is importing U.S. wheat, and more imports are possible later in the year, as Turkey seeks to meet its own requirements and its export commitments. While barley output should increase, imports may again be necessary because of the continued expansion of the livestock sector.

Israel is having its worst drought in 30 years and grain output will be less than one half of last year's record 395,000 tons. Imports may reach 1.4 million tons, mostly from the United States. Jordan's grain production fell two-thirds, to 50,000 tons; Syria's dropped 7 percent, to 2.5 million; and Lebanon's 10 percent, to 22,000. Syria is likely to import 470,000 tons of wheat and flour—about the same as last year. Corn imports will be more than double 1983's, at 200,000 tons. Jordan is forecast to import 400,000 tons of wheat, 160,000 of corn, 70,000 of barley, and 45,000 of rice, with the United States supplying most of the wheat and corn. Lebanon's wheat and flour imports should expand 40 percent to 350,000 tons; corn purchases are likely to be 180,000. The United States will be a major supplier of both. North Yemen is expected to purchase over 450,000 tons of wheat and flour, primarily from Australia and the United States.

In Morocco, another year of drought is concentrated in the south. Wheat output is estimated at 1.95 million tons; imports will likely be 2.3 million. Barley production is estimated at 1.2 million tons; up to 300,000 may be imported. Algerian wheat production is estimated at 900,000 tons; imports should reach 2.7 million. Expanding commercial livestock and poultry production is boosting feed grain import demand; 400,000 tons of corn and 75,000 of barley are anticipated. Morocco has been

offered \$244 million of U.S. blended credit, which should cover 1.5 million tons of wheat. The \$166 million of U.S. blended credit offered to Algeria should secure a larger U.S. share of the market.

Grain Imports Could Be Record

After remaining at 21 million tons for 3 years, the region's wheat and flour imports may rise to a record 22 million; increases are across the board. Egyptian wheat and flour imports should again surpass 6.4 million tons, including 2.1 million each from the United States and Australia, 1 million from the EC, and 625,000 from Canada. Some additional U.S. sales may occur if credit arrangements are made. Australian sales of wheat to Iran and Iraq each should rise to about 1.25 million tons, double the previous year.

U.S. wheat and flour exports to the region may be down slightly in 1984, following the 45-percent gain in 1983, as shipments to Egypt decline from the peak of 3.35 million tons. Egypt has so far received U.S. Government financing for only about 2 million tons of wheat. GSM-102 credit to Iraq should keep U.S. sales above 1 million tons again. Blended credit and GSM-102 financing will determine the volume of U.S. wheat exports this year to the region.

Imports of feed grains are likely to surpass 12 million tons in 1984, with changing suppliers' shares. Opportunities for expanding U.S. sales are excellent. Saudi barley imports from the EC should decline sharply, and extra sales of U.S. barley and corn may occur, possibly up to 1 million tons.

In 1984, the region's rice imports may approach 3 million tons. U.S. shipments may increase to about 720,000 with over 300,000 each to Saudi Arabia and Iraq. [Michael Kurtzig (202) 475-3444]

Southern Africa

Corn Imports To Rise

During the most recent growing season, drought continued over most of Southern Africa, marking the third consecutive year of below normal rains for many countries, and the second year of severe drought. The region's output of corn—the main staple—will surpass 8 million tons for the local 1984/85 marketing year, well below normal. However, because of lower stocks, the region will have higher import requirements in 1984/85. A year ago, South African and Zimbabwean corn stocks totaled over 2 million tons; these have now been almost exhausted.

The region's corn imports for 1983/84 were estimated at 3.2 million tons. For 1984/85, import needs are forecast at 4.4 to 5.3 million tons, a 50-percent increase. Only Malawi has fared well and is now harvesting another good corn crop. With adequate stocks, it will export about 150,000 tons to neighboring countries, but the United States will likely supply most of the region's corn. With the exception of South Africa, food aid will account for a significant share of the corn and other import needs, since most countries have limited commercial import capacity. Logistics for the region's unprecedented imports, which will mostly move through South

Southern Africa: Corn supply and utilization estimates

Country	1983/84 ¹				1984/85 ²			
	Prod.	Cons.	Exports	Imports	Prod.	Cons.	Exports	Imports
<i>1,000 metric tons</i>								
Angola	260	370	0	110	250-350	425	0	100-200
Botswana	4	60	0	60	3	65	0	65
Lesotho	76	160	0	85	30-40	175	0	140
Malawi	1,500	1,300	100	0	1,400	1,350	100-150	0
Mozambique	200	450	0	250	150-250	500	0	250-350
South Africa	4,075	7,250	285	2,500	4,319	7,350	250	3,050-3,550
Swaziland	41	135	0	90	100	135	0	35
Zambia	1,000	1,150	0	150	850-1,000	1,175	0	175-275
Zimbabwe	1,023	1,750	251	0	1,050-1,200	1,775	0	600-700
Total	8,179	12,625	636	3,245	8,152-8,662	12,950	350-400	4,415-5,315

¹Marketing years, preliminary. ²Forecast.

Source: U.S. Agricultural Attache reports, U.S. Embassy reports, and ERS estimates.

African ports, will necessitate all countries coordinating fully. The recent accord between Mozambique and South Africa, however, could lead to increased use of Mozambique ports.

South Africa's Imports To Set Record

South Africa's corn imports will exceed the record 2.6 million tons purchased in 1983/84, and could exceed 3.5 million. Decisions on stocks and the extent of substitution of other feeds for corn will determine the exact amount. South Africa has so far purchased 400,000 tons of feed wheat from Australia and may buy up to 1 million. For the second year, it will halt major exports, but as usual it is expected to supply most of the corn imported by Botswana, Lesotho, and Swaziland.

Most Countries Face Very Tight Supplies

In most of the region, import needs for 1984/85 will be similar to last year, except in Zimbabwe where needs are likely to be at least 600,000 tons. This represents a dramatic change for this normal corn exporter. Although production was also down last year, Zimbabwe had more than 1 million tons of stocks. It avoided imports and even met some export commitments. Zambia had somewhat better rainfall overall than countries to the south, but suffered dry spells in major growing areas, while reductions in fertilizer subsidies largely offset the impact of a producer price increase. There was apparently a small drop in production. Angola had adequate rains, but warfare has kept its agriculture in disarray. Swaziland's crop improved slightly, but conditions in Botswana and Lesotho have continued poor, creating record corn import needs.

Mozambique's food situation is desperate and unlikely to improve this year. Dry weather persisted over much of the country and the cyclone Domoina hit the southern end of Mozambique in February, causing flooding and great damage. Corn output will again be very low, although estimates are uncertain—a chronic problem in Mozambique. The amount of corn imported will largely depend on food-aid decisions. Zaire, not usually grouped in this region, has serious corn shortages in the south, because normal imports from Zimbabwe and South Africa are not available. [Peter Riley (202) 475-3444]

Latin America

Mexico's Agriculture Improves

Mexico underwent a second year of economic recession in 1983 as GDP declined almost 5 percent. The economic malaise contributed to rising unemployment, a decline in imports, and rescheduling of its huge foreign debt (\$85 billion plus). Trade during 1984 should see increased export value and more imports. Mexican crude oil prices have already been raised to reflect recovery in U.S. consumption of petroleum products.

One of the brighter spots in the Mexican economy has been the recovery of the agricultural sector following the 1982/83 drought. Crop production outpaced the livestock sector, which faced reduced demand due to the sluggish economy. Higher rainfall during 1983/84 increased prospects for coarse grains, oilseeds, and pulses, but the rain generally was too late to help the earlier season crops, chiefly wheat and rice. Cotton and sugarcane output registered increases, but the December 1983 freeze, which damaged U.S. and Mexican citrus crops, hurt coffee production.

Winter vegetable production is expected to be up because of increased plantings and favorable weather. With the exception of coffee and fresh citrus, agricultural exports will increase during 1984, and Mexico may again export sugar to relieve excess stocks and high storage costs. Improved crop prospects will reduce the country's dependence on food imports (estimated at about 25 percent of domestic requirements) and lessen its foreign debt. However, higher U.S. prices for Mexico's principal agricultural imports (corn, sorghum, and soybeans) could limit the foreign reserve gains from reduced imports.

Argentina's Exports Higher

The economic outlook for the Plate River Basin is positive. Argentina's GDP has increased for six consecutive quarters beginning in the second half of 1982. Despite the \$45 billion debt, the Government appears committed to a growth policy. GDP is projected to increase 5 percent in 1984. Paraguay and Uruguay are expected to show modest increases in GDP in 1984, after declines of 5 and 7 percent, respectively.

Wheat and coarse grain production in Argentina is forecast at 30.7 million tons in 1984, second only to last year's record crop of 32.6 million. This season's (December-November) wheat exports, an estimated 8 million tons, are second to the record volume of the 1982/83 season of nearly 10 million tons. The largest customers for Argentina's wheat were the USSR, Iran, India, Brazil, and Poland; China was a principal customer last year, but has not shown much interest this season. Corn and sorghum harvesting, which began in March, was delayed by excessive rainfall, but shipments have not been hampered. March exports of corn totaled 390,000 tons, compared with 207,000 to 297,000 tons for the same period during the previous 4 years.

Brazil's Exports Up

Brazilian agricultural output increased about 4 percent in 1983 only because coffee production increased dramatically. Food crop production suffered from excessive rains in the south and drought in the north. Per capita production of manioc declined over 10 percent; corn, 15; rice, 20; and beans, 45. Despite lower output, exports were up, contributing to the \$6.5-billion trade surplus. Increased exports of oilseeds, beef, and frozen concentrated orange juice (FCOJ) more than offset modest declines in other commodities. Despite lower prices, Brazil's export earnings from agricultural products increased 9 percent in 1983.

Agricultural output in 1984 may grow 2 to 4 percent, mostly in export crops including soybeans, coffee, oranges, and sugarcane. Higher 1984 prices for oilseeds and FCOJ may continue to support increases in export earnings and a targeted \$9-billion trade surplus.

Caribbean Production Higher

Agricultural output was up in most countries of the Caribbean in 1983, and it appears that 1984 could be a better year, if the weather cooperates. However, some islands have suffered severe droughts and water shortages in recent months. Caribbean farmers were unable to increase agricultural production for export, a primary source of foreign exchange. Consequently, most countries found it difficult to generate the export earnings desperately needed to finance production inputs.

Central American Agriculture Improves

Although the region faces slower economic activity and austere domestic measures, external financial aid will allow it to continue importing needed products.

Agricultural production was up in most of the Central American countries in 1983. Increased grain production accounted for most of the increase. Area planted was up, and yields were higher because of excellent weather. In spite of these output increases, per capita agricultural production continues to lag behind 1970's.

Andean Countries' Production Recovers

The Andean region's 1984 agricultural production will recover from the 6-percent shortfall of 1983. Bolivia, Ecuador, and Peru, whose crops suffered disastrously from changes in El Nino, should register the most recovery. Among commodities, potato production will

increase the most; corn, rice, and wheat (in Chile) will also increase significantly. Production of major export products like coffee, sugar, cocoa beans, and bananas is also likely to increase. While beef and pork will remain close to their current levels, poultry may decline because of the higher cost of imported feed grain and oilseed meals that go into broiler production. [John Link (202) 447-8133]

WORLD TRADE AND FOOD POLICY

International Organizations

GATT Agriculture Committee Meeting

The General Agreement on Tariffs and Trade (GATT) Committee on Trade in Agriculture held its first senior policy-level meeting in Geneva, Switzerland, on April 2-3. The Committee was formed following the November 1982 GATT Ministerial meeting to study ways of reducing trade protection of agricultural products, particularly through more effective control of trade-distorting measures such as export subsidies.

The meeting offered broad support for recommendations to bring all quantitative restrictions and other measures that affect import access under GATT disciplines and surveillance. A consensus was reached that a ruling should be explored requiring a general prohibition on export subsidies—albeit with agreed exceptions—and that export subsidies and export assistance of all types should be subject to the rule.

The meeting's agenda included:

1. The Linkage Between Domestic Agricultural Policies and Trade

Delegations agreed that domestic support programs do affect trade in agriculture. The EC noted, however, that while it is clear domestic policies may affect exports and imports, it could not fully agree with the GATT Secretariat's view that a causal link existed between the two. The EC felt that not all domestic aid programs cause external trade effects.

2. Strengthening GATT Article XI

There was broad support for bringing all measures which limit access to foreign agricultural markets under GATT article XI disciplines (article XI concerns the general elimination of quantitative restrictions). Many addressed the necessity of health and sanitary restrictions. While these measures were considered non-negotiable, it was agreed that a process should be available for questioning specific measures when they are unduly restrictive. It was further suggested that health and sanitary measures should be subject to notification and surveillance.

3. Improvement of Rules on Subsidies Affecting Exports

The United States approved of the direction of the recommendation to generally prohibit export subsidies, with agreed upon exceptions. It did not necessarily agree, however, that producer financing should qualify as an exception, noting further that any exception should be limited.

The EC, Hungary, Finland, and Spain also supported further exploration of the proposal. The EC emphasized

that it could not accept completely eliminating or phasing out direct export subsidies, but was willing to explore domestic production control as a qualifying exception to a prohibition on export subsidies. The EC wanted the GATT to strengthen and clarify article XVI to include an alternative to creating a new rule (article XVI concerns subsidies, which are treated further by the 1979 "subsidies code" that interprets articles VI, XVI, and XXIII).

The EC, Argentina, Australia, Chile, and Austria felt that all measures affecting exports—including subsidies in general and other forms of export assistance—should be subject to export subsidy disciplines.

The developing countries pressed their request for special and differential treatment on export subsidies—such as they presently enjoy under article XIV. This article, in effect, allows them to subsidize exports of nonprimary products. However, both the EC and the United States rebuffed their requests.

Trade Agreements

U.S.-Mexican Supply Agreement

The United States and Mexico signed their fifth annual agricultural trade agreement April 16. The agreement will make possible during 1984 the supply of at least 6.1 million tons of U.S. agricultural products to Mexico, including corn, sorghum, soybeans, sunflowerseed, cottonseed, and tallow. Mexico will partly finance the purchase of these commodities from the United States under an export credit guarantee for \$790 million from the

CCC, announced previously. The agreement also provides for direct CCC sales of powdered milk, semiannual consultations on Mexican import needs, and U.S.-Mexican transportation coordination.

Argentine-Mexican Grain Agreement

The Mexican state supply monopoly, CONASUPO, signed an agreement with Argentina's Grain Board (JNG) to buy a minimum of 1.0 million tons of grains and/or oilseeds annually for 5 years, beginning in 1984. The stated grains involved are wheat, corn, sorghum, soybeans, and sunflowerseed. Wheat (100,000 tons), sorghum (360,000), and sunflowerseed (182,000) Mexico has already purchased will count toward meeting the first year's commitment.

A reciprocal line of credit or clearing account agreement was also signed. Although many believe Argentina will use the new account to trade grain for fertilizer, the Argentine Central Bank claims that the clearing account is only for nontraditional industrial goods.

Argentine-Iranian Rice Sale

The Argentine Grain Board announced it had concluded a 60,000-ton rice sale to Iran, to be shipped this year. The value of the sale is roughly \$24 million cash payment. This is believed to be Argentina's first rice sale to Iran and is Argentina's largest single rice sale ever. Although the Grain Board made the sale, the rice cooperatives are expected to implement the sale. [Edward C. Wilson (202) 447-8470]

Trends in World Agricultural Land Use

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Abstract: New technology is essential to increase world crop production and to meet its food needs, because population is growing much faster than usable agricultural land. About half of the estimated 3 billion hectares of the world's arable land is currently used for crop production. But the remainder of the earth's surface is only marginally productive. Usable cropland has decreased in some regions.

Keywords: Agricultural lands, cropland, forests and woodlands, permanent pastures, other land, land use, land productivity.

Since 1955, the rate of increase in the world's agricultural land has diminished, while population growth has continued. This has put steadily increasing pressures on national resources. Excluding lakes, rivers, and land under permanent ice, the earth's land surface is estimated at 13 billion hectares. Of this, 2.5 to 3.4 billion hectares, or 19 to 27 percent, are potentially arable. However, as of 1980, less than 1.5 billion hectares, or about half of the estimated arable land, were actually cultivated.

Although the remaining 1.0 to 1.9 billion hectares, held largely in permanent pastures and forests, are unexploited, the most productive land is already under cultivation. Some of the world's remaining potentially arable land—that which is largely marginal in soil quality, climate, topography, or distances from population centers—could be cultivated to meet the needs of a growing population. However, the cost would be high.

Trends in Land Use

Cropland covers a relatively small area of the world's land. On a global scale, most of it is about evenly divided among permanent pastures, forests, and "other land" areas, which include deserts and urban, commercial, and recreational land. In 1980, land used for crop production was only about 11 percent of the world's land area, while pastures, forests, and other lands represented 24, 31, and 34 percent, respectively. However, these proportions differ greatly among regions, and change over time.

World land use patterns

Land use	1966	1980	1966	1980
	Million hectares		Percent	
Cropland	1,381	1,452	10.6	11.1
Permanent pasture	3,122	3,117	23.9	23.8
Forests and woodland	4,236	4,093	32.4	31.3
Other land	4,336	4,413	33.1	33.8
Total	13,075	13,075	100.0	100.0

Source: FAO land use data computer printout, Rome, August 1982.

Global Land-Use Patterns

The distribution of land types varies greatly from one region to another. South Asia and Eastern Europe, for example, use more than 40 percent of their available land for crop production, whereas North Africa and East Asia use only 4.4 and 4.6, respectively. In North Africa, 80 percent of the land is desert, and less than 2 percent (the smallest in the world) is forests and woodlands. In East Asia, an unusually high proportion (58 percent) is in pastures. This is because the region includes Mongolia, where mostly arid or semiarid land is suitable only for grazing.

In North America and Oceania, Central and South America, Near East, and Tropical Africa, 26 to 34 percent of the total land is in permanent pastures, because of the relative abundance of semiarid lands not suitable for cultivation.

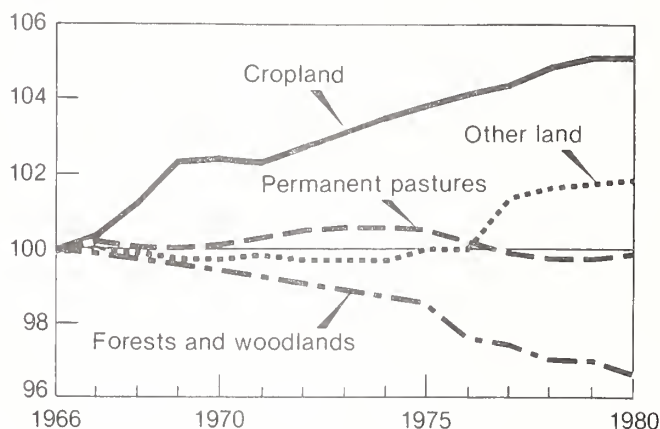
Forests and woodlands cover about one-third of the world's land area and are concentrated in a few places. Southeast Asia and South America have the highest proportion of forests and woodlands (largely tropical rain forests) to total land, with 57 and 64 percent, respectively. The Soviet Union has the highest proportion of forests in the Temperate Zone, more than 41 percent; while the Near East and China have low ratios, 7 and 12 percent, respectively. In Africa, wooded areas are primarily confined to the tropical rain forests in the Congo River basin. However, there is little forested area in North Africa. A fairly even distribution of forest, savannah, and desert characterizes the continent as a whole.

Trends in Cropland Use

World land-use data for 1955-80 show that cropland expanded primarily at the expense of forests and woodland, and to a lesser extent permanent pastures. The other lands declined gradually but steadily until 1970, remained essentially constant until 1975, and then began to rise rapidly. These trends reflect increased investment during the 1950's and 1960's to convert deserts and

World Land Use Changes, 1966-80

% of 1966



Source: FAO land use data, computer printout, Rome, August 1982.

USDA

wastelands into agricultural lands, followed by expanding conversion of forests and woodlands into urban and industrial use.

Cropland use for the world has grown with the rate of increase gradually declining from 1.0 percent in the late 1950's to below 0.3 in the 1970's. If this trend continues, expansion will drop to 0.2 percent in the 1980's, and to 0.15 in the 1990's. If this happens, only 50 to 60 million hectares, or about 4 percent, is likely to be added to the world's 1980 cultivated cropland by 2000. This is substantially lower than the nearly 20 percent projected by the Food and Agriculture Organization (FAO)¹ or even the 10 percent projected by Brown.² Based on trends over the last quarter century, this conclusion supports the contention of Dregne³ and the *Global 2000 Report*⁴ that despite the world's apparent abundance of unexploited arable land, the actual increase in cropland will be relatively small.

The principal expansion will probably occur in North America, Australia, New Zealand, South America, Tropical Africa, and Southeast Asia. However, cultivated cropland appears to have reached a plateau in Central America, the Caribbean, North Africa, and the Soviet Union, where it is likely to remain stable or to decline slightly. Future cropland use is likely to continue a downward trend in Western and Eastern Europe, China, and East Asia (principally Japan, Taiwan, and North and South Korea).

¹Food and Agriculture Organization of the United Nations, *Agriculture: Toward 2000* (Rome, 1979).

²Lester R. Brown, *Building a Sustainable Society* (New York: W.W. Norton & Co., 1981).

³Harold E. Dregne, *Impact of Land Degradation on Future World Food Production*, ERS-677 (USDA, ERS, 1982).

⁴Council on Environmental Quality and the U.S. Department of State, *The Global 2000 Report to the President* (Washington, D.C., 1980).

Per Capita Cropland Availability

Per capita cropland use decreased over 25 percent between 1955 and 1980, declining from 0.434 to 0.323 hectares per person. This trend could continue because expansion of agricultural land should decline 0.2 percent annually through the remainder of this century, while world population growth continues at an annual rate of 1.6 percent.

Population density per unit of cropland also varies considerably among regions. The world average is now 3 people per hectare, varying from 0.3 in Australia to more than 100 in Qatar. By 2000, the average is likely to increase to 4. Most probably, Australia and Japan will still be at opposite extremes, with 2.5 hectares per person in Australia and 30 people per hectare in Japan. Egypt and the Republic of Korea will likely have 24 to 30 people per hectare by 2000, and will face conditions similar to those in Japan. The United States and the Soviet Union are likely to have 1.3 to 1.4 persons per hectare of cropland.

The relative abundance of per capita cropland does not, however, necessarily indicate a high capacity to produce. The Soviet Union is chronically food deficient and a large net importer, while the United States exports substantial agricultural goods. Although both are equally endowed with cropland, other factors such as climate, technology, and management practices affect agricultural production and productivity. A large part of the agricultural land base in the Soviet Union is in the northern zone where highly variable temperatures and precipitation seriously constrain agriculture. Angola, Botswana, Chad, Gabon, Libya, Mongolia, Niger, Sudan, and Tunisia apparently have plenty of land. However, many of these countries are in semiarid or arid zones where the crop yield or livestock-carrying capacity per hectare is low.

Africa has a relatively high arable-land-to-population ratio, suggesting possible future increases in agricultural production. Severe constraints, however, are likely to limit actual increases because much of the cropland is of low productivity. North Africa—the Sahel in the west and the Horn in the east—and Southern Africa are in

arid zones where cropland is being lost to encroaching deserts. Similarly, cropland in Central Africa is in the humid tropics that inhibit increases in production with low solar radiation, torrential rains, shallow and leached or acid soils, excessive pest and weed infestations, and tsetse flies, which limit livestock production. North America, Oceania, and South America, with fewer production constraints, may offer better opportunities for production increases than Africa.

Factors Causing Changes

As agricultural land expands into marginal areas, the cost of land development increases until it eventually becomes cheaper to cultivate existing cropland more intensively than to develop new croplands. Unfortunately, reliable statistics are lacking on the cost of land development over time or across countries and regions.

Generally, agricultural land use changes along a two-step evolutionary pattern. First, permanent pastures or forested areas are converted to cropland. Then, some cropland goes out of production entirely because of urbanization, industrialization, transportation, or conversion to wasteland.

Agricultural land lost to urbanization and industrial or commercial use affects most countries, but the change is often hardly perceptible. It is of major concern, however, to Egypt, Western Europe, Japan, Puerto Rico, and the Republic of Korea. This process is also just beginning to be viewed as a problem in Canada, Mexico, Taiwan, and the United States.

The loss of agricultural land to encroaching deserts has largely been arrested and even reversed in most areas in the world. However, it still affects large areas in Africa, particularly in the Sahel and the Horn, and some cultivated areas in the Andean slopes of South America.

Resource conservation practices affected cropland area principally in Europe, and to some extent in Japan and China. Cropland under cultivation declined in Europe because of reforestation. In Italy, for instance, 2.3 million hectares and in France 1.5 million were withdrawn from agriculture between 1950 and 1980 because of reforestation. Some land was also withdrawn for recreational use. Agricultural land returned to its natural state should have positive long-term effects by improving the ecology.

Agricultural policies have been aimed either at expanding or curtailing cropland. For example, the purpose of the New Lands policy in the Soviet Union during the early 1960's was to convert grazing areas into approximately 7 million hectares of cropland, mainly in the Kazakhstan Republic. In 1968, another effort added 3 million more hectares of cropland. A similar attempt was made in Egypt between 1964 and 1966, when 230,000 hectares of desert were reclaimed for cropland. Many developing countries have introduced land reclamation projects to expand cropland, and if successful, these efforts, though smaller and less spectacular, will be more enduring than the Soviet and Egyptian schemes, which are being abandoned.

The pattern of agricultural land use is complex in the United States, Canada, and Australia, where a large percentage of domestic production is exported and subject to

Per capita cropland

Region	1955	1980
<i>Hectares</i>		
Australia & New Zealand	2.105	2.531
Canada	2.548	1.853
USSR	1.138	.874
United States	1.132	.837
South America	.534	.521
Sub-Saharan Africa	.578	.446
Eastern Europe	.500	.398
North Africa & Middle East	.711	.423
Central America & Caribbean	.496	.302
Western Europe	.316	.248
South Asia	.342	.227
Southeast Asia	.253	.196
China	.164	.102
Other East Asia	.085	.060
World	.453	.318

Source: Francis Urban and Thomas Vollrath, *Patterns and Trends in World Agricultural Land Use*, FAER No. 198, U.S. Dept. of Agriculture, Washington, D.C. 1984

fluctuations in foreign demand. During the three decades under review, U.S. public policies were aimed more often at curtailing cropland area than expanding it.

Conclusion

Technological change will continue to be essential for crop production to meet future world food needs because population is increasing at a much faster rate than usable agricultural land. Since the 1950's, cropland expansion has gradually declined 70 percent, from 1.0 percent annually to less than 0.3, whereas population growth has declined only 15 percent, from 2.0 percent to 1.7. As a result, per capita cropland availability dropped drastically, especially in Central America, China, Iran, Mexico, North Africa, and South Asia.

The disparity between population and cropland growth is likely to continue. Between now and the end of this cen-

tury, world population is expected to grow 1.6 percent annually, and cropland about 0.2 or less. Thus, population will increase 40 percent, while cropland will expand only 4 to 5 percent.

World population growth is expected to continue its gradual decline through the middle of the 21st century, when most countries are expected to reach zero population growth. Thus, since the rate of cropland expansion is likely to continue to decline, as it has during the past 25 years, most of the future growth in agricultural output will have to come from increases in land productivity. However, there is still the possibility that significant production increases will occur through expansion of cultivated cropland in Latin America, particularly in Argentina, Brazil, and Uruguay, as well as in selected regions of North America, Oceania, Tropical Africa, and Southeast Asia. [Francis Urban and Tom Vollrath (202) 447-8106]

How Important Are LDC's to U.S. Farm Exports?

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Abstract: The LDC's have become increasingly important markets for U.S. farm exports. Increased exports are the result of high population growth, rising per capita incomes, rapid urbanization, insufficient domestic production, and domestic food policies. In the long run, the greatest potential for trade growth is to the LDC's.

Keywords: Less-developed countries (LDC's), exports, wheat, rice, market share, population rate, per capita income, food policies, food production, urbanization, concessional food sales, debt crisis.

U.S. Export Growth to the LDC's

The LDC's have become increasingly important markets, taking an average 33 percent of U.S. farm exports since fiscal 1976. In 1983, they accounted for a record 40 percent, \$13.9 billion. The LDC's took an even larger share of some commodities, such as a record 70 percent of wheat and flour exports, a 37-percent increase over 1982. The developed countries and the centrally planned economies took only 16 and 14 percent, respectively. The LDC's took 40 percent of U.S. feed grain exports in 1983, up from 23 in 1982. Most of the feed grain was shipped to the newly industrialized developing countries (NIC's) and OPEC, reflecting increased demand for meat and poultry products.¹

Out of the top 20 U.S. farm export markets in 1983, 8 were LDC's, ranked as follows: Mexico, 3rd; South Korea, 5th; Taiwan, 8th; Egypt, 10th; India, 14th; Venezuela, 15th; Brazil, 19th; and Saudia Arabia, 20th.

The U.S. market share was also higher than its competitors in markets such as Mexico, where the United States had a 73-percent share of agricultural imports.

The importance of the LDC's to U.S. agricultural exports is also reflected in the compound annual growth rate of 11.5 percent between 1960 and 1980. The figure was even more impressive at 20.1 percent between 1970 and 1980, when the growth rate in exports to the NIC's and OPEC was 26 and 21.7 percent, respectively.

Increased U.S. exports to the LDC's was the result of many factors, including high population growth rates, rising per capita incomes, rapid urbanization, insufficient domestic production, domestic food policies, and U.S. export credit. Population growth in the LDC's has probably contributed the most to overall increases in agricultural demand. The world population has grown from 2.5 billion in 1950 to over 4.7 in 1984, with the rate declining slightly from 1.9 percent in the 1960's to 1.7 in 1983, but the 1983 LDC rate is closer to 3.

Although extensive family planning programs have decreased birth rates substantially in some countries, such as China, they have not daunted the birth rate in

¹NIC's include: Hong Kong, Taiwan, South Korea, Singapore, Mexico, and Brazil. OPEC includes: Saudi Arabia, Iran, Kuwait, the United Arab Emirates, Quatar, Iraq, Libya, Algeria, Nigeria, Gabon, Indonesia, Venezuela, and Ecuador.

others. Over 80 million people are born each year; most are born in LDC's that are not able to support them with domestic food production.

Food production made impressive gains between the 1950's and the 1980's. The global annual compound growth rate was 2.6 percent, and it was even 3 percent in the LDC's. In contrast, growth in per capita food production was the lowest in the LDC's at 0.6 percent, with considerable country and regional variation. In Africa, per capita food production actually declined 0.6 percent annually over the last three decades, an absolute decline of 16 percent. Sub-Saharan Africa has been especially hard hit by bad weather, unstable economic and political conditions, and population growth of 3.1 percent.

Increases in production that did occur in the LDC's can be attributed to increased and more efficient uses of land, water, and fertilizer, and to the development and application of yield-increasing grains. The five largest LDC wheat producers, China, India, Turkey, Pakistan, and Argentina, were responsible for most of the developing world's increased wheat production, expanding their production 5.4 percent between 1969-71 and 1979-81 mainly from improved yields.

Increased foreign exchange earnings in many LDC's have created high per capita incomes and increased demand for imported food, especially in the NIC's and OPEC. The average annual GNP growth rate in the LDC's was 5.3 percent between 1970 and 1980, compared with the world average of 3.4. Export earnings for many LDC's were 3.5 times larger in 1979 than in 1970. In addition, with import credit available, the Governments in many LDC's began active programs to improve the welfare of their populations, including programs to upgrade sub-standard diets.

As incomes rise in the LDC's, less disposable income is spent on traditional staples such as cereals and root crops, and demand is generated for a wider variety of foods. Urbanization and food subsidies have also contributed to increased demand for different foods, especially wheat products.

Many LDC's have consumer-oriented food policies that encourage consumption of commodities such as wheat and wheat products. These policies offer direct subsidies or rationing, especially in urban areas. Wheat is now the second most important food source in the LDC's after rice, and imported wheat has usually made up for insufficient domestic production. The most common Government intervention has been direct subsidies for wheat, wheat flour, and bread. For example, Egypt has one of the world's highest wheat subsidies on its balady bread. Rationing can also promote consumption of certain commodities by making them available to selected groups at subsidized prices, or for free. Some Asian countries ration, but their target is poorer urban consumers rather than the whole urban population.

Subsidies reduce a commodity's price relative to other commodities, and if removed, can be politically destabilizing. Many countries, under pressure from international financial institutions, have tried to cut subsidies to comply with austerity measures detailed under IMF loan requirements. In 1977, riots resulted in Egypt when a subsidy was curtailed. More recently, food riots have

erupted in Morocco, Tunisia, and the Dominican Republic when the Governments tried to cut food subsidies.

Concessional Sales to the LDC's

U.S. agricultural exports to the LDC's in the 1950's and 1960's were predominantly Government-financed concessional sales through the P.L. 480 and other aid programs. Exports under P.L. 480 totaled nearly \$29 billion between fiscal 1955 and 1979, and \$1.2 billion in 1983. In contrast, most exports to the LDC's today are commercial. Food aid has occupied a declining share of U.S. agricultural exports, dropping from an average of 30 percent annually during 1956-65 to an average of 4 percent between 1977 and 1983. Prior to 1966, commercial sales accounted for about 40 percent or less of exports to the LDC's, compared with over 80 in 1983. Current commercial imports of grains in the LDC's are directly related to food aid received as wheat in the past. Former P.L. 480 recipients that have become significant commercial customers include Taiwan, India, Pakistan, South Korea, and Brazil.

Grains have been the major commodities shipped under Government-financed programs, with wheat accounting for nearly 40 percent of the total value during 1955-79. Other principal commodities have been rice, feed grains, wheat flour, bulgur wheat, and soybean oil. On average, 3 percent of U.S. corn exports have been exported under Government-financed programs since 1977, compared with 15 percent of rice and 8 of wheat.

Outlook for Trade With the LDC's

The recession in the developed countries and curtailed credit financing cut U.S. exports to the LDC's. Prices for primary products, the mainstay of many LDC economies, declined to the lowest in 30 years, reducing export earnings. However, because of the strong dollar, the recession has left the price for grain imports relatively high.

The current debt crisis, combined with the strong dollar, has forced many LDC's to slash imports. This is especially critical in Latin America where the cumulative debt is over \$300 billion. Exports to Mexico, the third largest market for U.S. agricultural exports, are forecast to decline to \$1.6 billion this year from \$1.8 billion in FY 83 because of austerity measures.

The creditor banks usually require the IMF to monitor austerity programs in the debtor country before they will extend payment terms and lend new money. Programs are necessary so countries can put their economies back into shape to service their debts. So more foreign exchange is required to pay off LDC debts, leaving less to use on imports. Also, most of the debts are in dollars, currently appreciated against most other currencies, which raises the costs of financing debts.

During the 1980's, most of the growth in food demand has been, and will continue to be, in the LDC's because of high population growth rates, rising per capita incomes (forecast to follow the recovery in the developed world), large oil reserves in OPEC, and surplus production for export in many NIC's. Feed grain demand will rise in many of the NIC's and OPEC, where rising incomes have encouraged increased demand for meat.

The economic situation is critical, however, in many LDC's and for several countries full recovery—a return to their previous growth paths—may take several years. A recent World Bank report indicated that for the next few years, the LDC's as a group would need growth rates averaging better than 3 percent a year “just to keep their heads above water.” During their adjustment, an increase in financial assistance may be necessary to help them purchase food imports (P.L. 480 type assistance and public/private credit).

Besides financial assistance, providing access to the U.S. and other developed country markets provides the most secure way to increase LDC foreign exchange earnings and, therefore, growth potential. In the long run, the LDC's have a greater potential for agricultural trade growth than the developed countries. Given the continued importance of the LDC's in U.S. farm trade, the U.S. farmer will profit from strong and growing LDC economies. [Patricia M. Haslach (202) 447-8841]

The Increasing Importance of Cereal Imports in Sub-Saharan Africa

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Abstract: Sub-Saharan Africa's cereal imports continued to rise during 1977/78-1983/84. Wheat and rice comprise 80 percent of cereal imports, while corn, millet, sorghum, and root crops remain the dietary staples. Foreign exchange availability, Government import policies, and shifts in consumer demand play important roles in determining the level of imports.

Keywords: Import/consumption ratio, wheat, rice, Sub-Saharan Africa, imports, exports.

Susceptibility to hunger and starvation in Sub-Saharan Africa is well illustrated by the current drought, which has necessitated emergency food assistance. Food imports to Sub-Saharan Africa not only alleviate emergencies, but also contribute to changing consumption patterns. Cereal imports have doubled over the past 8 years to 9.5 million tons in 1983. Import dependence has increased sharply while weak export earnings have created severe foreign exchange constraints.

Cereal imports play an increasingly important role in Sub-Saharan Africa, where grain and other starchy staples compose over two-thirds of the diet in almost all countries. Imported cereals now account for 21 percent of cereal consumption, up from 16 in 1977/78 and only 7 in 1970. Wheat and rice comprise 80 percent of cereal imports, but are far less important in national diets where corn, millet, and sorghum and various root crops predominate. The growth of imports both supports and fuels changes in consumption patterns, as urban consumers come to prefer wheat and rice to other local staples.

Grain imports peaked in 1980, and then declined as foreign exchange constraints became severe in 1982 and 1983. However, in 1983 the drought increased imports. Dependence on rising imports generally spans the continent, but important differences occur across regions.

West Africa Imports Largest Quantities

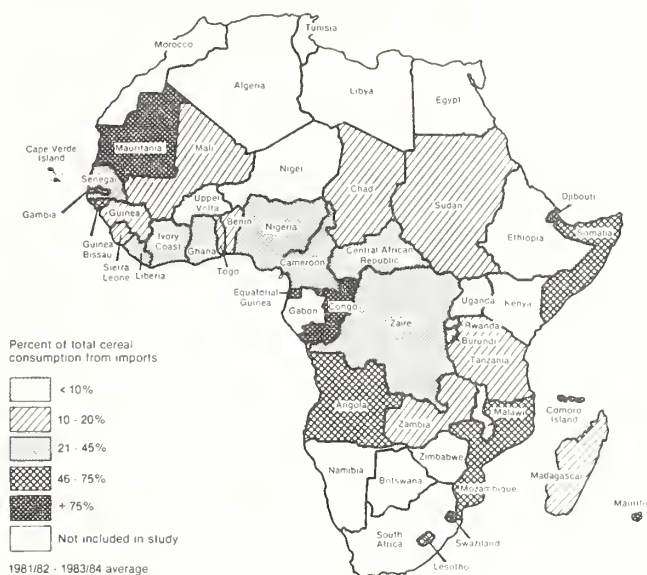
Nigeria, with its large population and oil economy, dominates the statistics of West Africa, which imports more

cereals than any region in Sub-Saharan Africa. In Nigeria, Government policy determines imports, not production or changes in demand. Oil revenues provide over 95 percent of foreign exchange and serve as an indicator for the following year's imports. In 1978, oil revenues were down, but cereal imports skyrocketed to 2.2 million tons: importers anticipated import restrictions and built up stocks. In 1979, when the restrictive policy was implemented, cereal imports fell to 1.7 million tons. In 1980, favorable oil exports resulted in record imports in 1981 of 2.5 million tons. In 1981, oil revenues again dropped, and anticipated import restrictions from October 1981 to March 1982 resulted in stockbuilding until restrictions were announced in April. This stockbuilding dulled the impact of restrictions on imports for that year, which remained at 2.4 million tons. The lower 1983 imports of 2.2 million tons reflect the continuation of the Government's import restrictions.

Besides Nigeria, many other countries in West Africa have been hard hit by declines in world prices for their exports. Despite increased demand, high foreign debt limits their ability to import additional cereal commercially. For these countries, food aid has enabled them to maintain imports. The healthier economies of Cameroon and Ivory Coast have been able to increase imports from 140,000 tons to 360,000 and 292,000 to 635,000 tons, respectively.

While West Africa shows the largest share of imports, East Africa has the highest compound growth rate at 11 percent. The high import growth rate in Sudan affects

Sub-Saharan Africa



the rate in East Africa the same way that Nigeria influences the high imports of West Africa. Sudan's imports climbed from 165,000 tons in 1977 to 525,000 in 1983, with wheat accounting for most of the increase. Almost all of the wheat imports are U.S. concessional sales. This helps to isolate wheat imports from the effects of foreign exchange shortages. Government bread subsidies, a high rate of urbanization, and rising incomes contributed to the increased demand for wheat. In 1983, the Government discontinued the budget subsidy on bread. But wheat imports benefit from a foreign exchange subsidy, which has mitigated the price increase necessary to make consumer wheat prices on par with other cereals. Rapid urbanization continues, but Sudan's depressed economy has caused incomes to decline the past 2 years. So far, no evidence suggests these changes have decreased the demand for wheat.

Even before the recent droughts in Southern Africa, the percentage of imports in consumption had been rising. Corn, the major grain in the region, comprises half the growth in cereal imports. South Africa and Zimbabwe, which have traditionally exported corn within the region, have become importers to meet their own consumption needs and replenish stocks drawn down by 2 years of drought.

Sub-Saharan Africa: Cereal imports

Year	West	East	South	Central	Total
1,000 metric tons					
1977/78	4,223	809	917	639	6,588
1978/79	3,879	1,035	949	588	6,451
1979/80	3,988	1,487	1,286	730	7,491
1980/81	5,060	2,383	1,615	796	9,854
1981/82	4,938	2,040	1,280	856	9,114
1982/83	4,965	1,563	1,589	770	8,887
1983/84	5,410	1,651	1,731	692	9,484

Imports are least important in Central Africa where roots and tubers are the major staples. Per capita cereal consumption is 50 kilograms a year compared with 125 for all of Africa. Imports averaging 750,000 tons supply approximately 34 percent of cereal consumption. The 3.5-percent import growth rate is the lowest of any region.

Wheat and Rice are Major Cereal Imports

A closer look at wheat and rice shows that Government policies, changes in consumer preference, and availability of foreign exchange and credit influence imports. The share of wheat and rice in cereal consumption has risen from 24 percent in 1977/78 to 28 in 1983/84. The increased availability comes from imports, not from higher production. Millet, sorghum, corn, and root crops remain the dietary staples in most countries. Per capita millet and sorghum availability declined from 57 kilograms a year in 1977/78 to 52 in 1982/83, because imports did not compensate for declining production. Corn imports are more significant in total availability, which remained at 42 kilograms a year. The drop in millet and sorghum availability in 1983/84 because of the drought to 44 kilograms a year, and in corn to 40, further show that imports of these staples do not increase to maintain per capita availability.

Wheat accounts for 52 percent of cereal imports by Sub-Saharan Africa, and 76 percent of wheat consumption is imported. Only relatively small parts of the continent are suitable for wheat production, and attempts to introduce wheat as a crop have proved to be expensive failures in many countries. Imported wheat is principally used for bread, and urban areas account for most of consumption in nonproducing countries.

Nonproducing middle-income countries, with relatively large urban populations, consumed 20 kilograms per capita in 1983/84, which was as much as in producing countries.¹ In low-income nonproducing countries, the per capita consumption was 10 kilograms. The countries with per capita wheat consumption of less than 5 kilograms are all land-locked, with little urbanization. High overland transportation costs in Sub-Saharan Africa translate into higher prices for imported goods including food. This distribution suggests that urbanization and the cost of imported cereals relative to domestic foodstuffs influences demand for wheat.

Urbanization occurs as rural dwellers move to the cities in search of jobs and a better standard of living. They have left the subsistence agricultural economy, and now surplus domestic production or imports must meet their food needs. Underdeveloped transportation networks make it costly to move domestic produce to the cities, and lack of storage facilities make it difficult to market domestic cereals. Many African cities developed around

¹Middle-income countries, as defined by the World Bank, with per capita GNP greater than \$400, are Angola, Cameroon, Congo, Ivory Coast, Kenya, Lesotho, Liberia, Mauritania, Nigeria, Senegal, Zambia, and Zimbabwe. Kenya and Zimbabwe are considered wheat producers, along with Ethiopia, Sudan, Tanzania, and Uganda.

ports providing easy access to imports. Given the convenience of bread, its price in Nigeria compares favorably with traditional cereals in the urban areas.

A change in consumer preference is another reason for higher wheat consumption in middle-income countries. As incomes increase and as time takes on an opportunity cost, preferences lean to more easily prepared foods. The change is especially pronounced among women who enter the labor force for the first time. With cooking fuel expensive in urban centers, ready-to-eat bread may be more economical than price alone would suggest. In many African cities, bread has replaced traditional staples in daily breakfasts.

Rice Imports Rising

Rice differs from wheat in that producers not only import the largest quantities, but also show the highest import growth rate. In Liberia, Sierra Leone, and Madagascar, per capita consumption is above 120 kilograms a year. A second group of countries, most of which are in West Africa, show per capita consumption of more than 10 kilograms, which is satisfied by domestic production and imports. Several of these countries are middle-income and must feed large urban populations. Rice consumption is low in nonproducing countries. Unlike wheat, increased demand could theoretically be met from improved production. However, this has not happened and imports are increasing.

The same factors that apply to the shift in demand towards wheat, are true for rice. Retail rice prices declined in real terms in the countries with the highest per capita consumption. Madagascar heavily subsidized rice consumption. However, in June 1983, prices were raised over 100 percent when the subsidy was lifted. The hurricanes that struck the island this year preclude assessing the price changes on production or consumption. In several West African countries, fixed Government prices for rice declined in real terms since 1970. The retail price was recently raised in Senegal and the Ivory Coast. Senegal's history of rice imports dates back to early colonial times, and it is doubtful whether higher prices will diminish demand. Ivory Coast became an important importer of rice in the 1960's. The Government recently raised the retail price of rice to promote consumption of traditional food crops. However, these food crops are already in short supply in the cities, and any switch away from rice requires their increased availability.

In the future, imports of rice will continue their high rate of growth if the relative price remains low in countries with high per capita consumption, and if domestic production fails to increase. Although still small in absolute quantity, rice imports by nonproducers also increased and could follow a trend similar to wheat, as

consumers substitute these commodities for traditional diets of coarse grains and root crops.

Demand for Cereals Rising

Despite food self-sufficiency as a stated national priority in most Sub-Saharan African countries, domestic production will not play a major role in determining imports in the future. Dramatic qualitative improvements in production and marketing are essential to achieve self-sufficiency, and only a few countries will succeed. Imports will be required to maintain per capita cereal availability—already below minimum standards in many countries—or consumption will decline even further. Imports impose a foreign exchange cost that strains limited resources, especially if overall export earnings have declined.

Foreign exchange availability plays a key role in determining actual imports. In Nigeria, food imports grew during the oil boom. A decline in oil revenues ended the growth in imports. However, imports remain high despite foreign exchange shortages. Food imports assume a high priority when governments must restrict imports.

Wheat and rice prices have declined since the mid-1970s and current prices make it relatively cheap to import cereals. World prices for wheat and rice are \$183 and \$315 a ton, respectively. Recently, large quantities of 100-percent broken rice from Thailand sold at \$205 a ton.² The rise in cereal imports to Sub-Saharan Africa corresponds with declining prices, but this could be coincidental. If prices increase in the future, then changes in imports could be studied for their responsiveness to price.

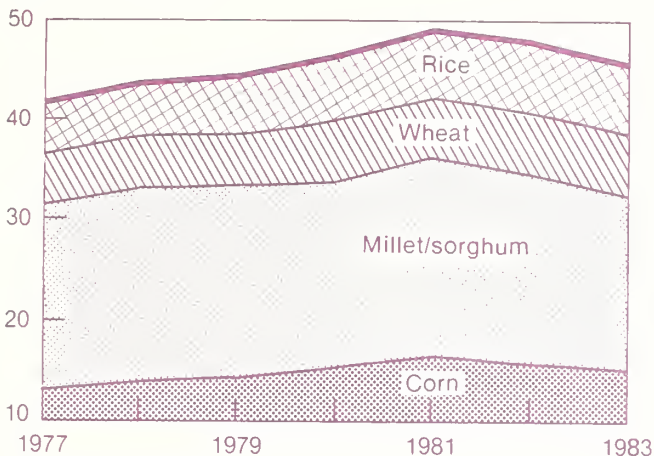
Cereal imports for 1984/85 needed to maintain consumption at 1983/84 levels are estimated at 10.2 million tons. Actual imports will depend on Government policies and on the availability of foreign exchange, credit, food aid, and local production.

Out of this market, what share can U.S. exporters hope to capture? Pakistan and Burma have joined Thailand as major rice exporters, as the world rice market becomes increasingly competitive. The United States is currently priced out of commercial sales and any exports to Sub-Saharan Africa will have to be financed concessionally. For wheat, U.S. exports are projected at 2.3 million tons, and concessional financing will be necessary in many sales. The market remains highly competitive with the EC offering export subsidies. [*Mary Bohman (202) 475-3449*]

²Rotterdam CIF price for wheat and Thai rice in March, 1984. Price paid by Senegal for low-quality Thai rice.

Cereal Consumption

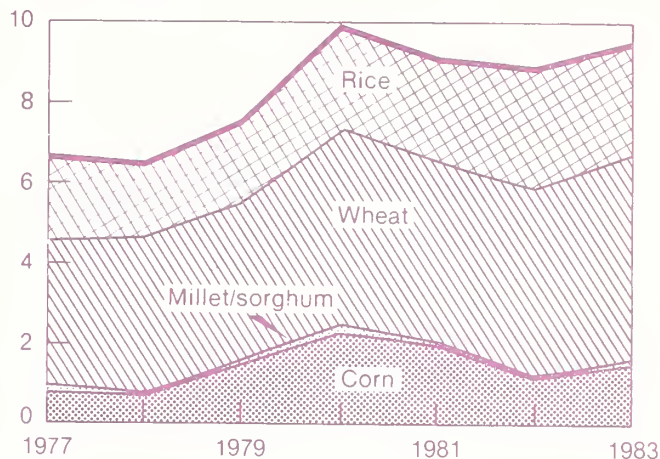
Mil metric tons



USDA

Cereal Imports

Mil metric tons



USDA

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